SHARP®

ELECTRONIC CASH REGISTER

MODEL

ER-A430

INSTRUCTION MANUAL

If undue force is applied to the drawer, the cash register will become unstable.

CAUTION:
The socket-outlet shall be installed near the equipment and shall be easily accessible.

VORSICHT:
Die Netzsteckdose muß nahe dem Gerät angebracht und leicht zugänglich sein.

ATTENTION:
La prise de courant murale devra être installée à proximité de l'équipement et devra être facilement accessible.

AVISO:
El tomacorriente dede estar instalado cerca del equipo y debe quedar bien accesible.

VARNING:
Det matande vägguttaget skall placeras nära apparaten och vara lätt åtkomligt.

This apparatus complies with the requirements of BS 800 (EN 55014): 1988 and BS 6527 (EN 55022): 1988.

Dieses Gerät stimmt mit den Bedingungen der EN 55014, 02. 1987 und der EN 55022, 04. 1987 überein.

Cet appareil répond aux spécifications de la EN 55014, 02. 1987 et EN 55022, 04. 1987.

Dit apparaat voldoet aan de vereiste EN 55014, 02. 1987 en EN 55022, 04. 1987.

Apparatet opfylder kravene i EN 55014, 02. 1987 og EN 55022, 04. 1987.

Questo apparecchio è stato prodotto in conformità alle EN 55014, 02. 1987 e EN 55022, 04. 1987.

Αύτή ὴ συσκευή τηρεῖ τίς προδιαγραφές τῆς EN 55014, 02. 1987 κατ EN 55022, 04. 1987.

Este aparelho responde às especificações da EN 55014, 02. 1987 e EN 55022, 04. 1987.

Este aparato cumple las especificaciones de la EN 55014, 02. 1987 y EN 55022, 04. 1987.

CAUTION:
For a complete electrical disconnection pull out the mains plug.

VORSICHT:
Zur vollständigen elektrischen Trennung vom Netz, den Netzstecker ziehen.

ATTENTION:
Pour obtenir une mise hors-circuit totale, débrancher la prise de courant secteur.

AVISO:
Para una desconexión eléctrica completa, desenchufar el enchufe de tomacorriente.

VARNING:
För att helt koppla från strömmen, dra ut stickproppen.

INTRODUCTION

Thank you very much for your purchase of the SHARP Electronic Cash Register, Model ER-A430.
Please read this Manual carefully before operating your machine in order to gain a full understanding of its functions and performance.
Please keep this Manual for future reference. It will help you, if you encounter any operational problems.

IMPORTANT

- **Install your ER-A430 in a location that is not subject to direct radiation, unusual temperature changes, high humidity or exposed to water sources.**
  Installation in such locations could cause damage to the cabinet and the electrical components.
- **The register should not be operated by an individual with wet hands.**
  The water could seep into the interior of the ER-A430 and cause component failure.
- **When cleaning your register, use a dry, soft cloth. Never use volatile liquid, such as benzine and thinner.**
  The use of such chemicals will lead to discoloration or deterioration of the cabinet.
- **The ER-A430 register plugs into any standard wall outlet (Official (nominal) voltage).**
  Other electrical devices on the same electrical circuit could cause the ER-A430 to malfunction.
- **If the register malfunctions, call your local dealer for service — Do not try to repair the register yourself.**

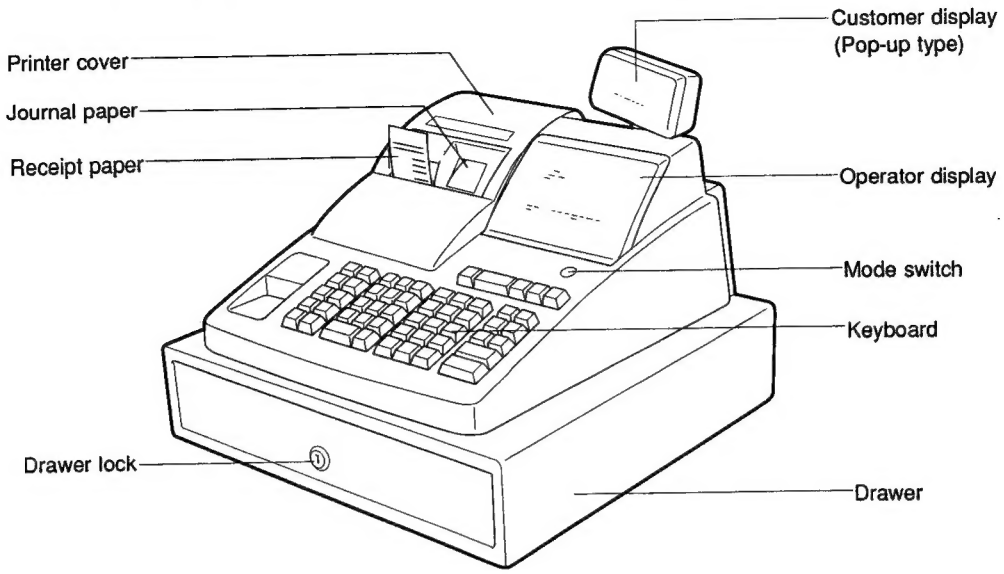
PRECAUTION

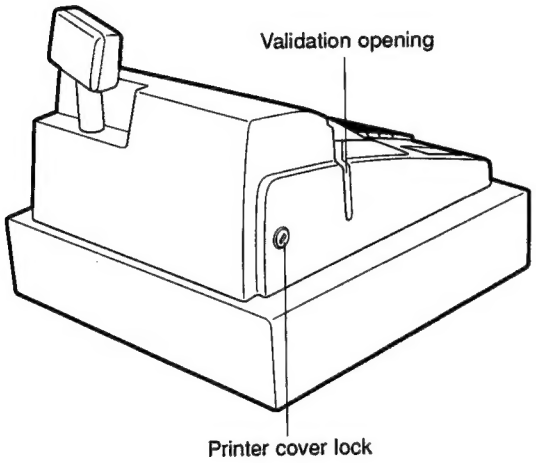
This Electronic Cash Register has a built-in memory protection circuit which is operated by rechargeable batteries.
As you know, all batteries will, in time, dissipate their charge even if not used.
Therefore to insure an adequate initial charge in the protection circuit, and to prevent any possible loss of memory upon installation, it is recommended that each unit be allowed to recharge for a period of 24 to 48 hours prior to use by the customer.

In order to charge the batteries, the machine must be plugged in and left on in the "REG" (Registration) mode. This recharging precaution can prevent unnecessary initial service calls.

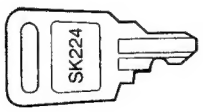
CONTENTS

PHYSICAL CHARACTERISTICS OF THE ER-A430 REGISTER

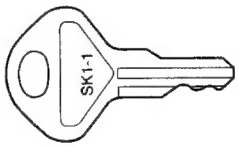




- Printer cover lock
  Lock: Turn 90 degrees counterclockwise.
  Unlock: Turn 90 degrees clockwise.
- Printer cover lock key



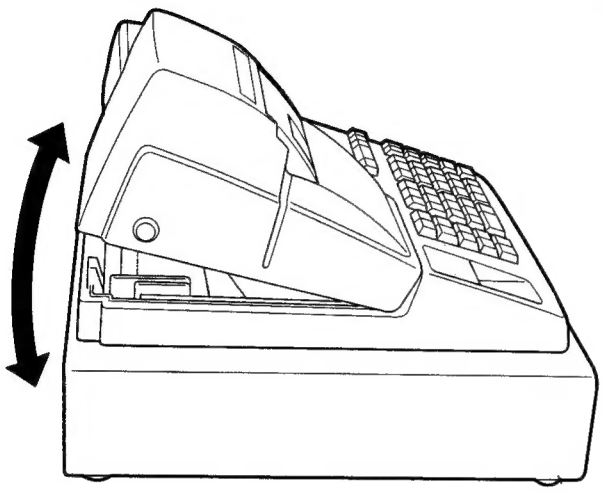
- Drawer lock
  Lock: Turn 90 degrees counterclockwise.
  Unlock: Turn 90 degrees clockwise.
- Drawer lock key

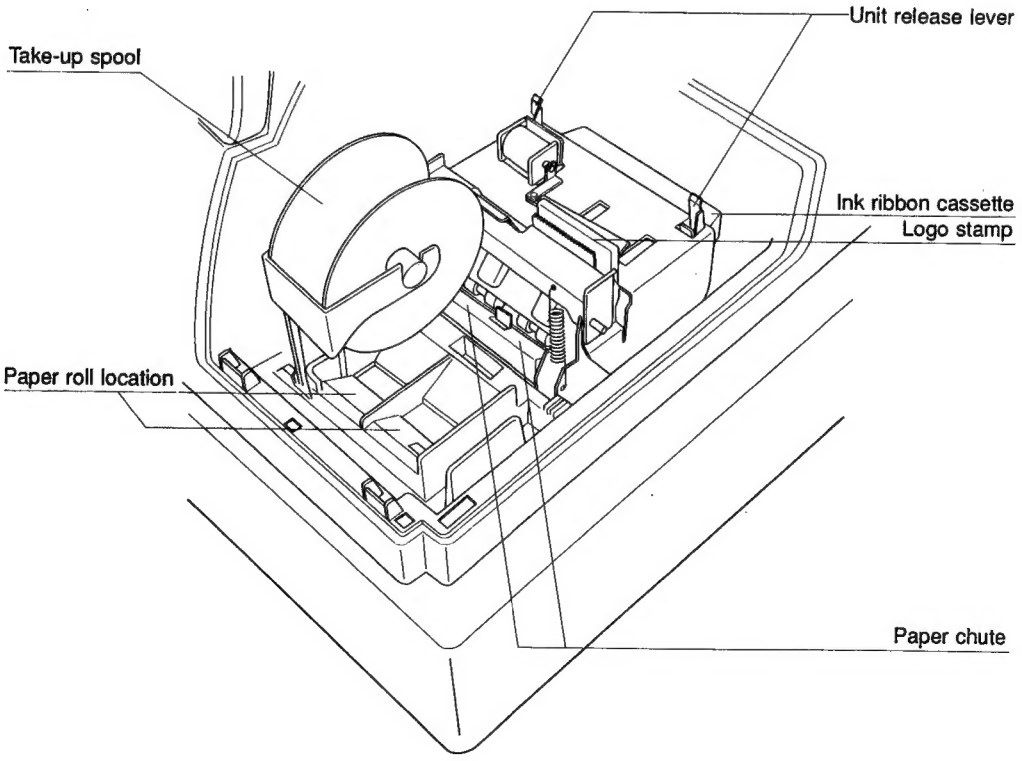


INSTALLING AND REMOVING THE PRINTER COVER

When removing the printer cover, lift up its rear.

When installing the printer cover, hook it on the pawls on the cabinet and shut it.

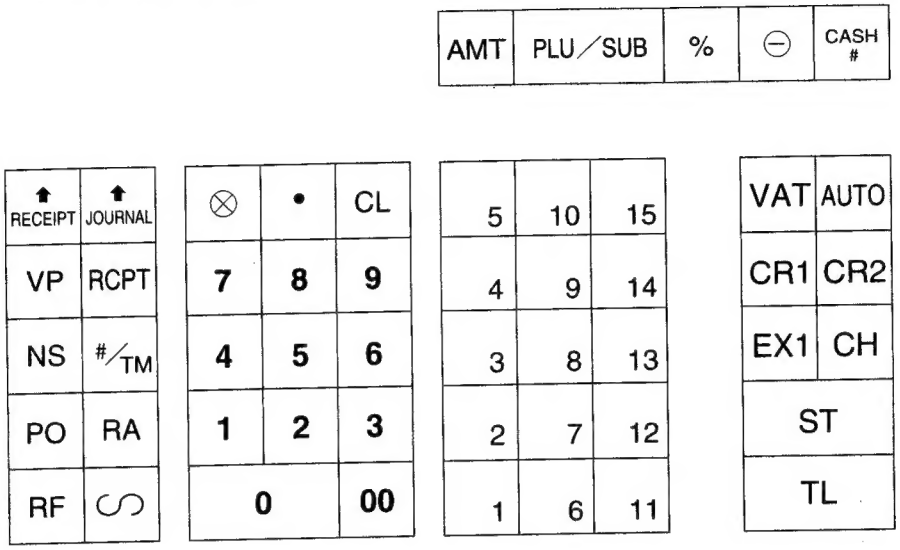




KEYBOARD LAYOUT AND SWITCH AND KEY DESCRIPTIONS

1. Keyboard

Standard keyboard layout



Note: All the keys but the numeric, clear, decimal point, multiplication, subtotal, total and two paper feed keys can be changed in their positions. If you want to change the layout, however, contact your dealer.

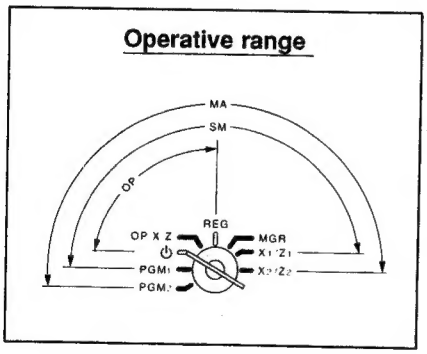
- 0 ~ 9, 00 — Numeric keys
- • — Decimal point key
- CL — Clear key
- ⊗ — Multiplication key
- 1 ~ 15 — Department keys
- RECEIPT — Receipt paper feed key
- JOURNAL — Journal paper feed key
- RCPT — Receipt print key
- VP — Validation print key
- NS — No sale key
- VAT — Value added tax key
- % — Percent key
- ⊖ — Discount key
- CASH # — Cashier code entry key
- EX1 — Foreign currency exchange 1 key
- #/TM — Non-add code/time display key
- RA — Received on account key
- PO — Paid out key
- RF — Refund key
- ∽ — Void key
- PLU/SUB — Price lookup/subdepartment code entry key
- CR1, CR2 — Credit 1 and 2 keys
- CH — Cheque key
- AMT — Amount key
- ST — Subtotal key
- TL — Total (cash total) key
- AUTO — Auto key

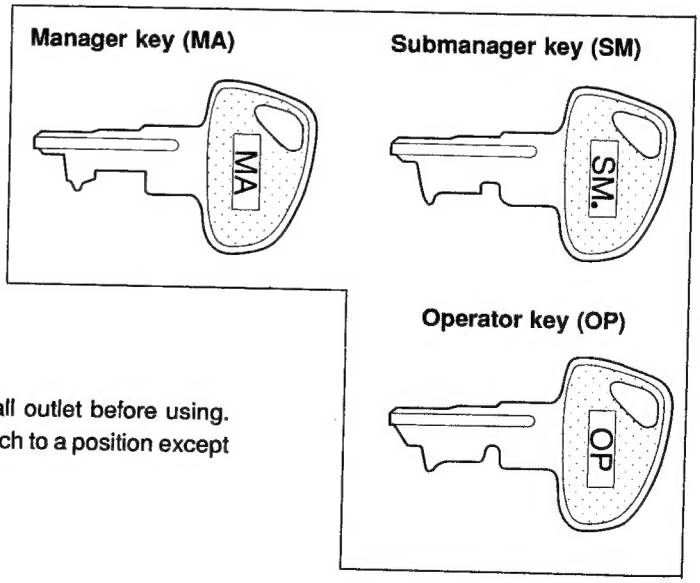
The following function keys can optionally be mounted in addition to those shown in the figure of the standard key layout. Consult your dealer.

- 16 ~ 40 — Department 16 through 40 keys
- CR3 ~ CR8 — Credit 3 through 8 keys
- ⊖2 — Discount 2 key
- EX2 ~ EX4 — Foreign currency exchange 2 through 4 keys
- %2 ~ %4 — Percent 2 through 4 keys
- CA2 — Cash total 2 key
- AUTO 2 ~ AUTO 5 — Auto 2 through 5 keys

2. Mode switch and mode keys

The mode switch can be operated by inserting one of the three supplied mode keys — manager (MA), submanager (SM), and operator (OP) keys. The keys can be inserted or removed only when they are in the REG or ⏻ position.





* Plug your machine into a standard wall outlet before using. To put on the power, turn the mode switch to a position except the ⏻ position.

The mode switch has these settings:

⏻ : For switching off the display to prevent keyboard entries

OP X/Z : For individual cashier reading and resetting, for printing of his or her arrival and departure time and for switching the state of the Receipt ON and OFF

REG : For various entries

PGM1 : For programming those items that need to be changed often: e.g., unit prices of departments or PLUs and percentages

PGM2 : For various PGM1 programming and programming of those items that do not require frequent changes: e.g., date, time, or a variety of register functions

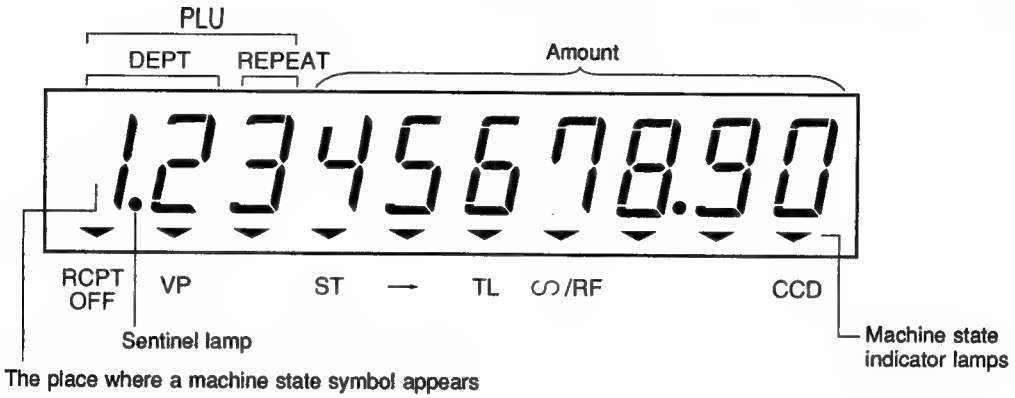
MGR : Only the manager can use this setting to make various entries that are not permitted to be made by cashiers – for example, after-transaction voiding and limit overriding.

X1/Z1 : For reading and resetting of any daily totals

X2/Z2 : For reading and resetting of any daily and periodic totals

DISPLAYS

1. Operator display



The place where a machine state symbol appears

- The number of repeats is displayed from "2" and counted up with each repeat. When you've registered ten times, the display shows "0".

  Example: (2 → 3 → 4 . . . 9 → 0 → 1 → 2 . . .)

- **Machine state symbols**

P : Appears in the tenth place from the right during programming.

E : Appears in the tenth place when an error is detected.

\- : (Floating) Appears when an entry is made into a minus department or PLU/subdept. and when a discount, reduction, refund, or void entry is made.

O : Appears in the tenth place when the tax-included subtotal is displayed or when the amount tendered is smaller than the sale amount.

U : Appears in the tenth place when the [∞] key is depressed in the MGR mode, indicating an entry into the VOID mode. While your register is in the VOID mode, this symbol continues to be in the display except when department numbers, PLU numbers or tax-included subtotals are displayed. And appears when a subtotal void is made.

• : (Sentinel lamp) Appears right below the tenth place when the cash in drawer amount exceeds a programmed sentinel amount. The sentinel check is performed for the total cash in drawer.

C : Appears in the tenth place when the [EX1] ~ [EX4] keys are pressed to calculate a subtotal in foreign currency.

- **Machine state indicator lamps**

RCPT OFF : Lights up or down when you press the [RCPT] key in the OP X/Z mode.
(When the lamp is on, the machine prints on the journal alone. When the lamp is off, the machine prints on both the journal and the receipt.)

VP : Lights up when the machine is programmed for compulsory validation printing.

ST : Lights up when a subtotal is displayed.

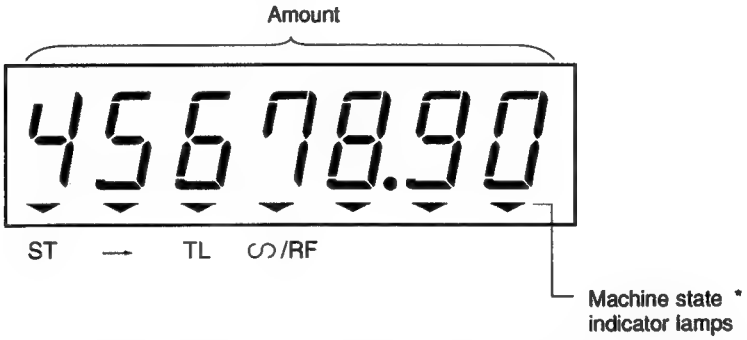
→ : Lights up when the change due is displayed after an amount tendered entry.

TL : Lights up when a transaction is finalized with the [TL], [CA2], [CH] or [CR1] through [CR8] key. However, this lamp does not light up when a transaction is finalized with an amount tendered entry.

∽/RF : Lights up when the [∽] key is pressed or when an item void entry is made.
Lights up when the [RF] key is pressed or when a refund item entry is made.

CCD : Lights up when the machine is programmed for compulsory cash/cheque declaration.

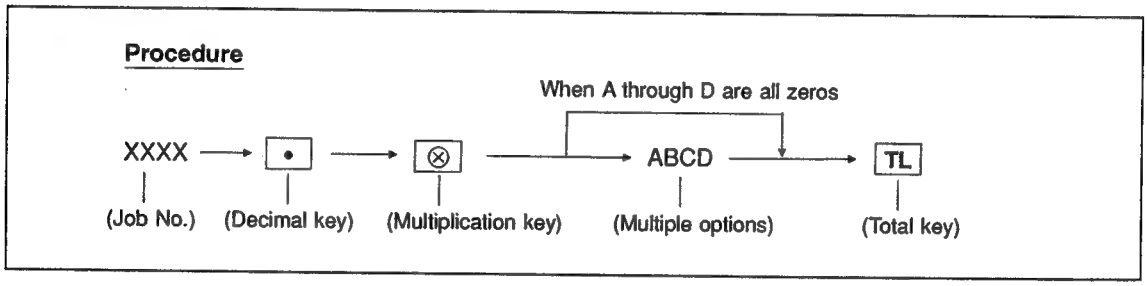
2. Customer display (Pop-up type)



* These lamps light up in the same manner as the machine state indicator lamps in the operator display.

GENERAL INSTRUCTIONS

There are a few things you should keep in mind when programming the ER-A430.
The following sections are considered general instructions because they apply to the majority of jobs and procedures contained in this manual. If you take a few minutes to read these, you might save yourself some time and aggravation when programming.



Entering numbers
When entering the job number or numbers as part of a procedure, use the numeric key. It contains the decimal [•] key and the [⊗] key used in all procedures.

To change memory
To change the memory of the machine, always press the decimal [•] key after entering the job number.

Reading a program
To take a reading of a program, that is printed on the register printer, do not press the decimal [•] key as indicated in the procedure. After you press the [TL] key, the reading is printed on the register printer.

Entering options as a part of a procedure
In procedures that allow the entry of multiple options, e.g., A B C D, **leading zeros are not required**; however, **trailing zeros are required**. In the A B C D example, if you wanted to program a 1 for the C option, you would enter 10. (Leading zeros for A and B are not required; trailing zeros are required.)

Reading and entering key operations
You'll notice that there's an illustration for each job entitled — Key operation. What that illustration shows is how you would enter the associated example into the machine, using the numeric and alpha key.
The key operation for setting the register number is listed as:

2612	[•]	[⊗]	(1)
123456		[TL]	(2)

In (1) above, you would enter 2612, press the decimal [•] key and then press the [⊗] key.
In (2) above, you would enter 123456 (for the sample register number) and then press the [TL] key. This completes the procedure.
In most cases you end a procedure by pressing the [TL] key.

Recovering from an error message
If you happen to get an error beep and the message "E" when programming, to recover and correct the condition, simply press the [CL] key. You'll notice that the error message is cleared from the display and you can continue programming.

PROGRAMMING

Your machine allows you to program in two modes: PGM1 and PGM2. The PGM1 mode is for programming those items that need to be changed often: unit prices of departments/PLUs, and percentages. The PGM2 mode is used for programming all PGM1-mode programs and those items that require less frequent changes: date, time, tax rate, and the functions of each key.

We describe below the programming or setting procedures of various items. Program every item necessary for your store following the appropriate procedures.

* To set the mode switch to the PGM1 position, use the manager or submanager key; and to set to the PGM2 position, use the manager key.

Preparations for programming

1. Plug your machine into a standard wall outlet.
2. Put the manager or submanager key in the mode switch and turn it to the PGM1 or PGM2 position depending upon the programming you are about to do.
3. Check to see whether both journal and receipt rolls are present in the machine. If they are missing, install journal and receipt rolls correctly.
4. Program necessary items into your machine.

1. Setting the date and time (PGM2 mode)

(1) Setting the date

Procedure

2610 → [•] → [⊗] → [Date (6 digits)] → [TL]

Example:

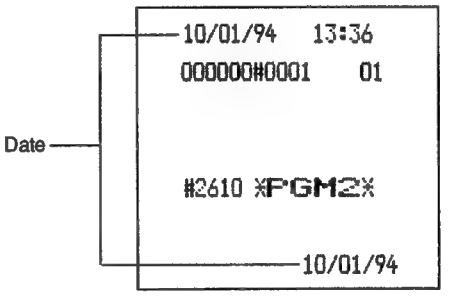
Key operation

2610 [•] [⊗]

10 01 94 [TL]

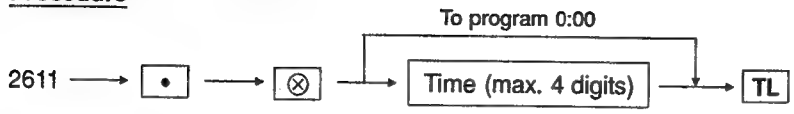
Year
Month
Day

Print



(2) Setting the time

Procedure

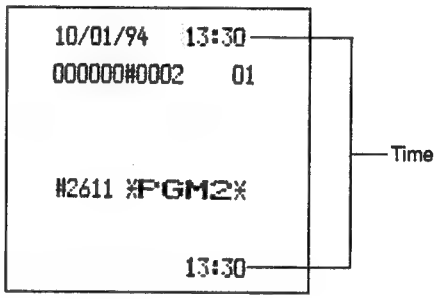


Example:

Key operation

2611 • ⊗
13 30 TL
Minute
Hour

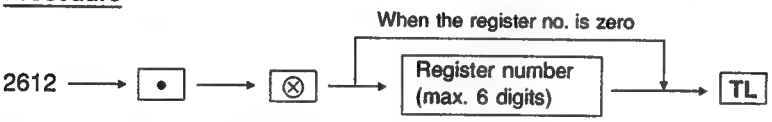
Print



2. Setting the register number (PGM2 mode)

When your store has two or more registers, it is practical to set separate register numbers for their identification. You may set them in a maximum of six digits.

Procedure

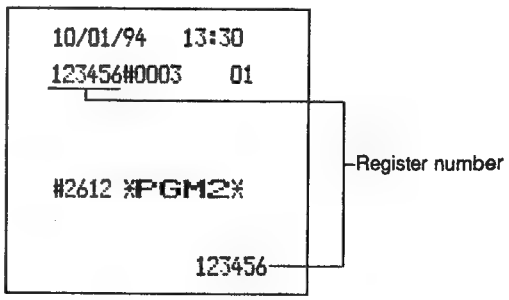


Example:

Key operation

2612 • ⊗
123456 TL

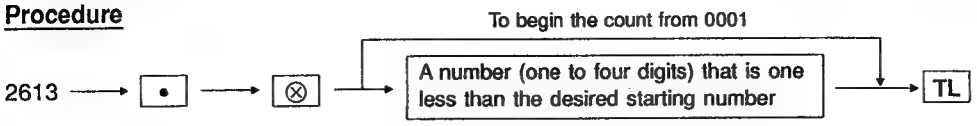
Print



3. Setting the consecutive number (PGM2 mode)

The consecutive number is increased by one each time a receipt is published.
Enter a number (one to four digits) that is one less than the desired starting number.

Procedure



Example:

Key operation		Print
2613 • ⊗		10/01/94 13:30
Start from "1001"	1000 TL	123456#1000 01
		Consecutive number
		#2613 *PGM2*
		1000

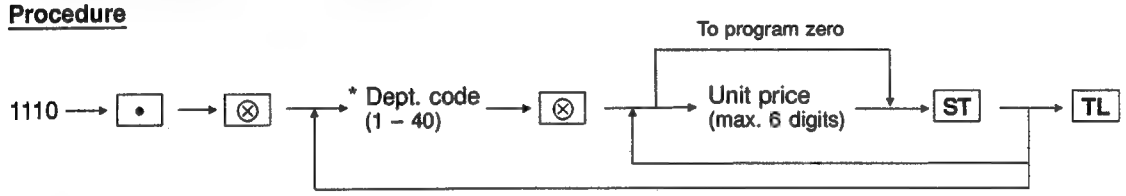
4. Programming for departments

Your machine allows you to perform the following programming for each department.

(1) Programming of unit prices (PGM1 or PGM2 mode)

Program a unit price for each department.

Procedure



* Dept. code: Standard 15 departments/max. 40 departments

When the programming for the largest department code is completed with depression of the ST key, the programming operation terminates automatically. This holds true of every programming for departments.

Example:

Key operation	Print
1110 • ⊗	#1110 *PGM2*
10 ⊗ 150 ST	D10 1.50 — Unit price
TL	DPT.10 G01
	003 L17

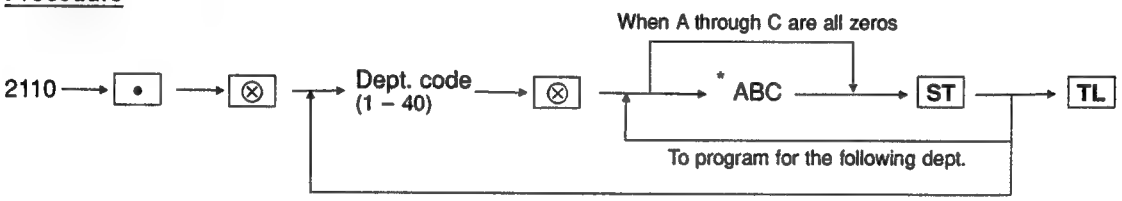
(2) Functional programming (PGM2 mode)

① Compulsory item validation print
If item entries must be validated, program corresponding departments for compulsory item validation print.

② SIF (Single-item finalization), SICS (Single-item cash sales), or normal sales
Each individual department can be programmed as an SICS, SIF or normal department.

③ Four types of unit price entry
You may select one of the following four types of unit price entry for each department.
ⓐ Open and preset
ⓑ Preset only
ⓒ Open only
ⓓ Inhibit department key

Procedure



*

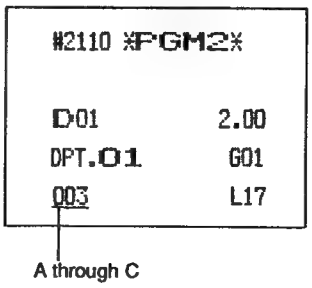
	Item		Entry
A	Item validation print	Compulsory	1
		Non-compulsory	0
B	SIF/SICS/Normal	SIF (Single-item finalization)	2
		SICS (Single-item cash sales)	1
		Normal	0
C	Type of unit price entry	Open and preset	3
		Preset only	2
		Open only	1
		Inhibit	0

Example:

Key operation

2110 [•] [⊗]
1 [⊗] 3 [ST]
[TL]

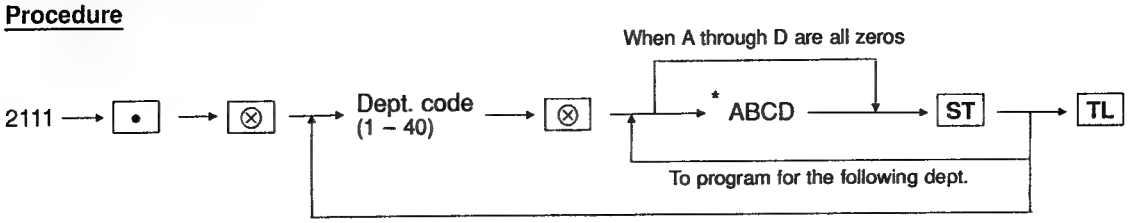
Print



(3) Programming of tax status (PGM2 mode)

Program a tax status for each department.

Procedure



*

Item	Tax status			Entry
	Ordinary system	Swiss system	Selection	
A		VAT1	YES	1
			NO	0
B	VAT3 or TAX3	TAX3	YES	1
			NO	0
C	VAT2 or TAX2	TAX2	YES	1
			NO	0
D	VAT1 or TAX1	TAX1	YES	1
			NO	0

Note 1: Item A is programmable only for the Swiss tax system.

Note 2: When the Swiss tax system has been selected, one of Tax3 (B), Tax2 (C), and Tax1 (D) can be selected in combination with VAT1 (A).
Example: ABCD = 1001, 1010 or 1100

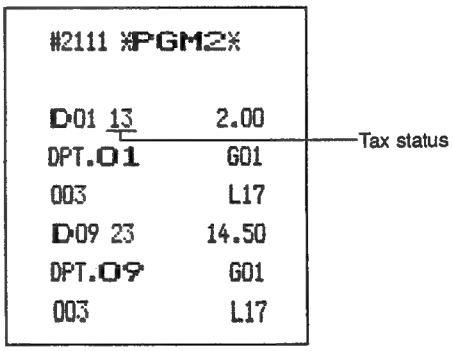
Note 3: The tax system of your machine has been factory-set to automatic VAT1 – 3. If you desire to select any of automatic tax 1 – 3, manual VAT1 – 3, manual VAT1, manual tax 1 – 3, and Swiss tax systems, contact your dealer.

Example:

Key operation

2111 • ⊗
1 ⊗ 101 ST
9 ⊗ 110 ST
TL

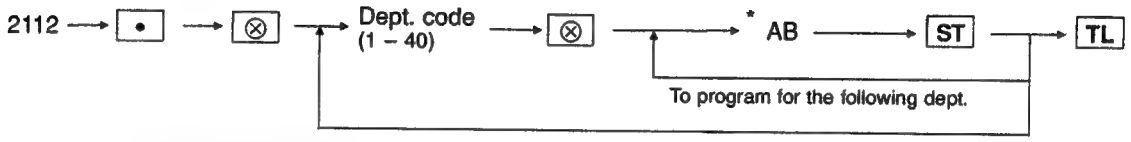
Print



(4) Setting a limit amount (HALO) of entry (PGM2 mode)

You can set upper limit amounts (HALO: High Amount Lockout) for each department.
The limit is effective for the REG-mode operations and can be overridden in the MGR mode.
HALO limit is represented by two figures as follows.

Procedure



* AB is the same as A x 10^B.
A: Significant digit (1 through 9)
B: 0 through 7

For example, presetting 14 (100.00) here means that amount entries up to 100.00 are allowed in REG mode. (In this case, HALO limit is 100.00.) But when you preset 17, the HALO limit is 99999.99.

Example:

Key operation

2112 • ⊗
1 ⊗ 16 ST
15 ST
TL

Print

#2112 *PGM2*
D01 13 2.00
DPT.01 G01
003 L16
D02 20.00
DPT.02 G01
003 L15

HALO limit

(5) Assigning departments to groups (PGM2 mode)

You can assign departments to a maximum of 14 groups.

Procedure

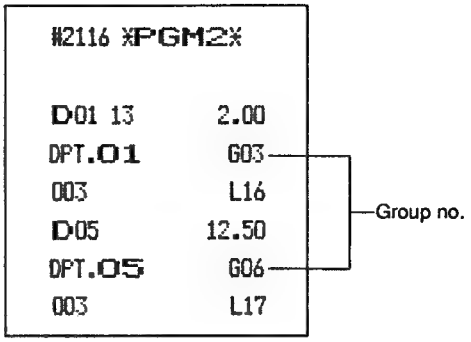
*AB:	Dept. (+)	1 through 9 (groups 1 through 9)
	Dept. (–)	10
	Hash (+) dept.	11
	Hash (–) dept.	12
	Bottle Return (+) dept.	13
	Bottle Return (–) dept.	14

Example:

Key operation

2116 [•] [⊗]
1 [⊗] 3 [ST]
5 [⊗] 6 [ST]
[TL]

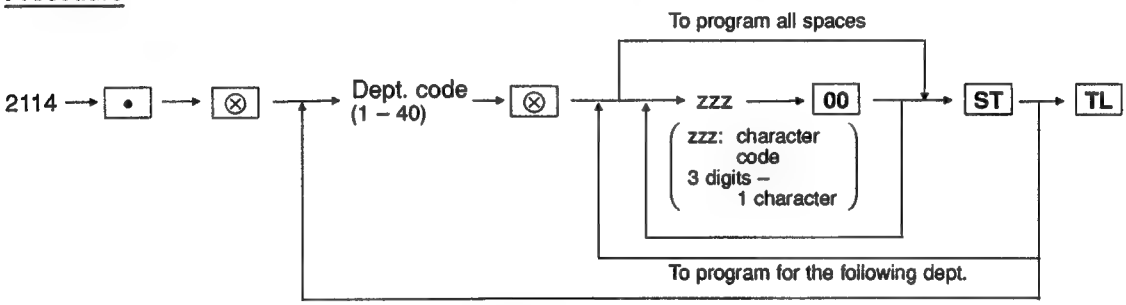
Print



(6) Programming of department text (PGM2 mode)

You can program a maximum of 12 characters (standard: 8 characters) for each department. Program the text by using corresponding character codes (see the alphanumeric character code table on the next page).

Procedure



Note: If you enter the DC code (Double Character Code: 253) before entering the character code, that character is printed in double size.

Example: Programming MILK (milk) for dept. 10 with the letter "M" being double size

Key operation

2114 [•] [⊗]
10 [⊗]
253 [00] 077 [00] 073 [00]
076 [00] 075 [00] [ST]
[TL]

Print

#2114 *PGM2*

D10 1.50
MILK G01
003 L16

ALPHANUMERIC CHARACTER CODE TABLE

CODE	Char.	CODE	Char.	CODE	Char.	CODE	Char.	CODE	Char.	CODE	Char.
001	á	033	!	065	A	097	a	129	1	161	°
002	â	034	"	066	B	098	b	130	2	162	⌐
003	ê	035	#	067	C	099	c	131	3	163	⌟
004	î	036	$	068	D	100	d	132	4	164	¯
005	ì	037	%	069	E	101	e	133	1/2	165	·
006	í	038	&	070	F	102	f	134	F/T	176	⊟
007	ô	039	'	071	G	103	g	135	←	177	Á
008	ó	040	(	072	H	104	h	136	→	178	Í
009	û	041	)	073	I	105	i	137	ᔕ	192	Ç
010	ú	042	*	074	J	106	j	138	ᔕ	193	İ
011	œ	043	+	075	K	107	k	139	◄	194	Ġ
012	ű	044	,	076	L	108	l	140	►	195	Ş
013	ú	045	–	077	M	109	m	141	F	224	*
014	ő	046	.	078	N	110	n	142	T	225	§
015	ó	047	/	079	O	111	o	143	↓	226	Ø
016	Λ	048	0	080	P	112	p	144	ç	228	↑
017	Ψ	049	1	081	Q	113	q	145	°	229	]
018	Γ	050	2	082	R	114	r	146	¿	230	[
019	¨	051	3	083	S	115	s	147	ù	231	"
020	Ω	052	4	084	T	116	t	148	à	232	ä
021	Δ	053	5	085	U	117	u	149	Æ	233	ö
022	Θ	054	6	086	V	118	v	150	ø	234	ü
023	Ξ	055	7	087	W	119	w	151	Å	235	æ
024	π	056	8	088	X	120	x	152	⌑	236	å
025	Σ	057	9	089	Y	121	y	153	é	237	É
026	Υ	058	:	090	Z	122	z	154	è	238	ñ
027	Φ	059	;	091	Ä	123	{	155	Pt	253	DC*
028	Ű	060	<	092	Ö	124	|	156	ì		
029	Ú	061	=	093	Ü	125	}	157	Ñ		
030	Ő	062	>	094	^	126	β	158	ò		
031	Ó	063	?	095	_	127	¢	159	£		
032	(SPACE)	064	@	096	'	128	‼	160	¥		

*DC: Double Character Code

5. Programming for PLUs

A standard model is equipped with 400 PLUs.
Each PLU requires you to program the following.

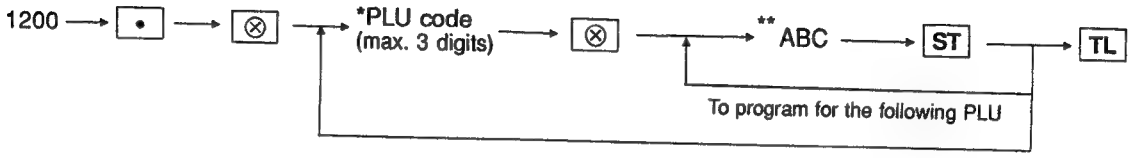
- **PLU code (3 digits)**
- **PLU type (PLU, subdepartment, PLU/subdepartment, prohibit, or delete mode)**
  (i) If the PLU mode (i.e. automatic preset amount entry) is selected, individual PLU entries can be made by entering the assigned code and depressing the [PLU/SUB] key.
  (ii) If the subdepartment mode is selected, the [AMT] key must be depressed after the price entry followed by the PLU code entry. The entry is finalized by the [PLU/SUB] key depressed.
  (iii) If the PLU/subdepartment mode is selected, follow up the described entries under (i) and (ii).
  (iv) If the prohibit mode is selected, the assigned PLU and/or subdepartment code cannot be entered. This mode does not clear the PLU/subdepartment program data.
  (v) If the delete mode is selected, data programmed for each PLU is deleted.
- **Associated department**
  When a PLU is associated with a department, the following functions of the PLU depend on the programming for the department.
  (i) Grouping (group 1 through group 14)
  (ii) Single item cash sale/single item finalize
  (iii) HALO (for subdepartment only)
  (iv) Item validation print compulsory/non-compulsory
- **Unit price (max. 6 digits)**
- **Base quantity for split-pricing entries (max. 2 digits)**
- **Sign (+/–)**
  The function of every PLU/subdepartment varies according to the combination of its sign and its associated department's sign as follows.

Sign		Function of PLU/subdepartment
Dept.	PLU/subdept.	
+	+	Serves as a normal plus PLU/subdept.
–	–	Serves as a normal minus PLU/subdept.
+	–	Accepts store coupon entries, but not split-pricing entries.
–	+	Not valid; not accepted.

- **Tax status**
- **Item label (8 characters, maximum: 12 characters)**

(1) Definition of PLU codes and department assignment (PGM1 or PGM2 mode)

Procedure



*PLU code: 1 through 999 (free code)
**AB: Associated department code (01 through 40)
C: PLU type
To select the deletion mode, enter 4.
To select the PLU/subdept. mode, enter 3.
To select the PLU mode, enter 2.
To select the subdept. mode, enter 1.
To prohibit PLU/subdept., enter 0.

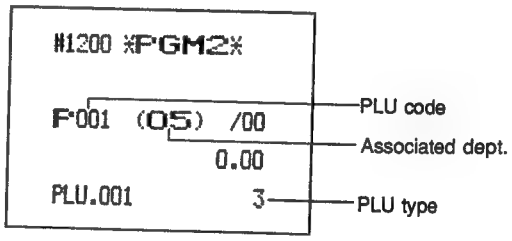
Note: Programming the PLU code 999 automatically terminates the programming operation.

Example:

Key operation

1200 • ⊗
1 ⊗ 53 ST
TL

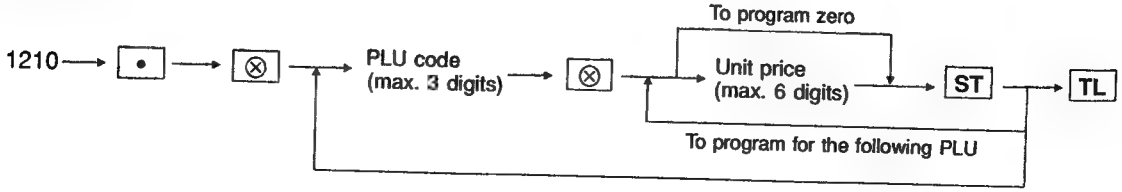
Print



(2) Programming of unit prices (PGM1 or PGM2 mode)

You can program a unit price for each PLU.

Procedure



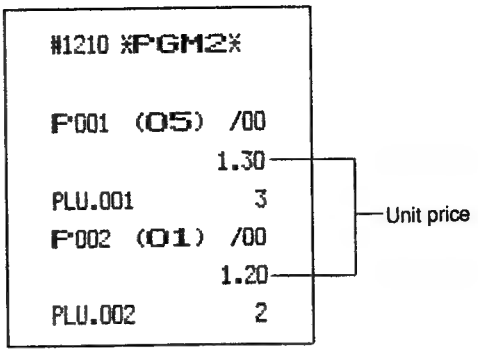
Note: When the programming for the largest one of those PLU codes defined in job #1200 is completed with depression of the ST key, the programming operation terminates automatically. This holds true of every programming for PLUs shown below.

Example:

Key operation

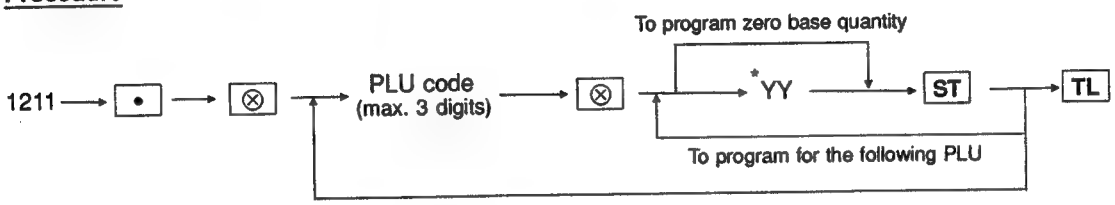
1210 [•] [⊗]
1 [⊗] 130 [ST]
120 [ST]
[TL]

Print



(3) Programming of base quantity (PGM1 or PGM2 mode)

Procedure



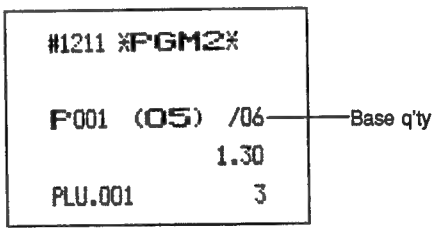
*YY: Base quantity (two digits)
Program a base quantity for each PLU/subdepartment dedicated to split-pricing entries.

Example:

Key operation

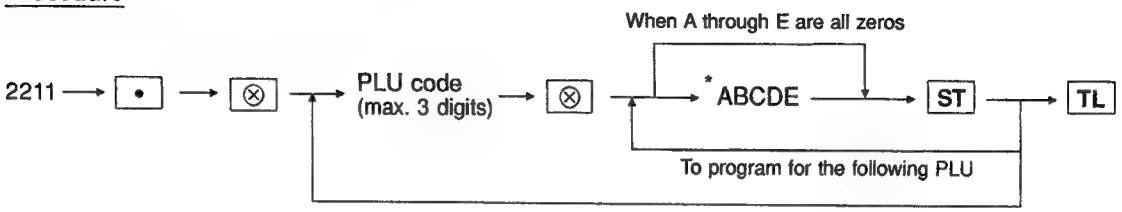
1211 [•] [⊗]
1 [⊗] 6 [ST]
[TL]

Print



(4) Programming of sign and tax status (PGM2 mode)

Procedure



*A: Sign
To set as plus PLU, enter 0, and to set as minus PLU, enter 1.
B, C, D and E: Tax status

Item	Tax status			Entry
	Ordinary system	Swiss system	Selection	
B		VAT1	YES	1
			NO	0
C	VAT3 or TAX3	TAX3	YES	1
			NO	0
D	VAT2 or TAX2	TAX2	YES	1
			NO	0
E	VAT1 or TAX1	TAX1	YES	1
			NO	0

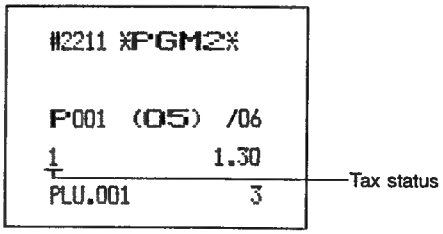
Note 1: Item B is programmable only for the Swiss tax system. If you do not select this system, enter 0.
Note 2: When the Swiss tax system has been selected, one of Tax3 (C), Tax2 (D), and Tax1 (E) can be selected in combination with VAT1 (B).
Example: BCDE = 1001, 1010 or 1100
Note 3: The tax system of your machine has been factory-set to automatic VAT1 – 3. If you desire to select any of automatic tax 1 – 3, manual VAT1 – 3, manual VAT1, manual tax 1 – 3, and Swiss tax systems, contact your dealer.

Example:

Key operation

2211 • ⊗
1 ⊗ 1 ST
TL

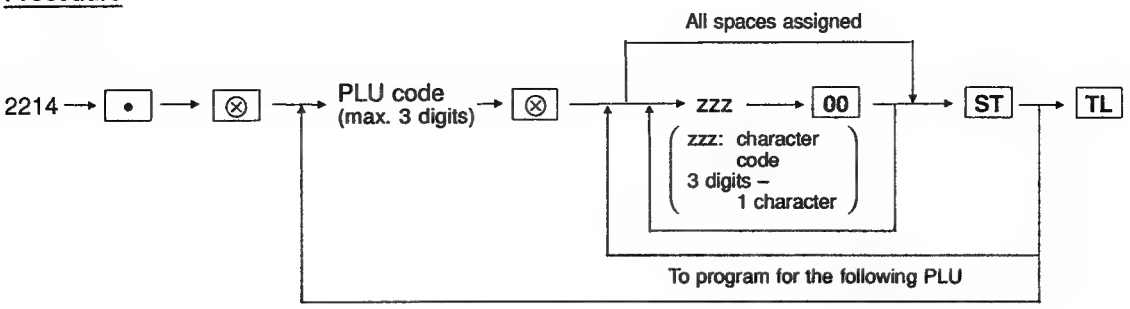
Print



(5) Programming of PLU text (PGM2 mode)

You can program a maximum of 12 characters (standard: 8 characters) for each PLU. Refer to "Programming of department text" and "ALPHANUMERIC CHARACTER CODE TABLE" (page 20).

Procedure



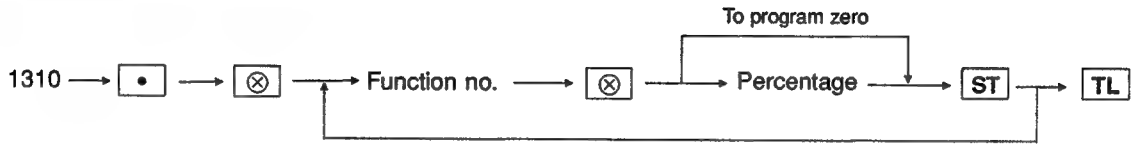
Example: Programming ORANGE (orange) for PLU code 4.

Key operation	Print
2214 • ⊗	#2214 *PGM2*
4 ⊗	
079 00 082 00 065 00	P004 (01) /00
078 00 071 00 069 00 ST	0.00
TL	ORANGE 2

6. Function parameter programming

(1) Programming of premium and discount rates and currency exchange rate (PGM1 or PGM2 mode)

Procedure



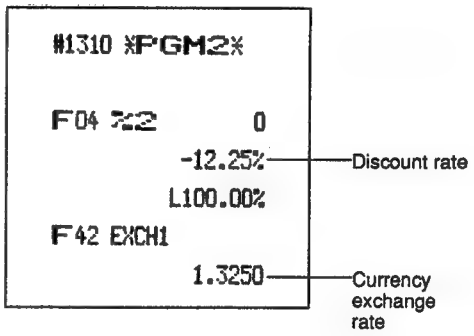
Function	Function no.	Percentage
% 1 % 2 % 3 % 4	3 4 5 6	a maximum of 3-digit integer + 2-digit decimal (0.00 to 100.00)
EXCHANGE 1 EXCHANGE 2 EXCHANGE 3	42 43 44	a maximum of 4-digit integer + 4-digit decimal (0.0000 to 9999.9999)

Example:

Key operation

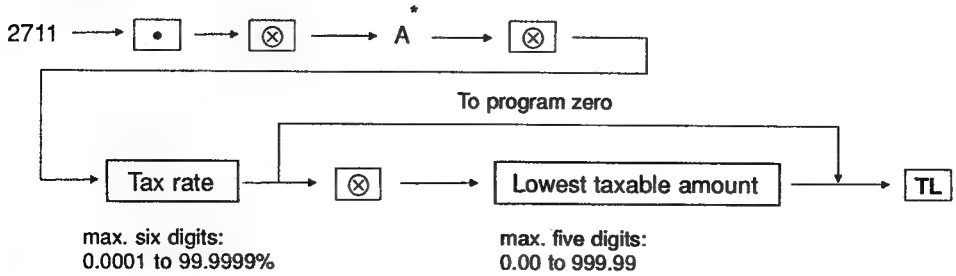
1310 • ⊗
4 ⊗ 1225 ST
42 ⊗ 13250 ST
TL

Print



(2) Programming of tax rate (PGM2 mode)

Procedure



*A: When you program a tax rate as tax rate 1, enter "1"; when you program it as tax rate 2, enter "2"; when you program it as tax rate 3, enter "3"; and when you program it as tax rate 4, enter "4".

Note 1: The lowest taxable amount is valid only when you select add on tax system.
If you select VAT (value added tax) system, it is invalid.

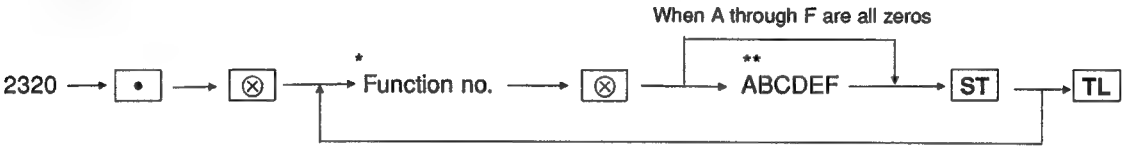
Note 2: If you make an incorrect entry before pressing the third [⊗] key in programming a tax rate, cancel it with the [CL] key; and if you make an error after pressing the third [⊗] key, cancel it with the [ST] key. Then program again from the beginning correctly.

Example:

Key operation	Print
2711 [•] [⊗]	#2711 *PGM2*
2 [⊗]	TAX 2 7.0000% — Tax rate
70000 [⊗]	0.12 — Lowest taxable amount
12 [TL]	

(3) Function programming for the finalization keys (PGM2 mode)

Procedure



* Function no.:

CASH = 31	CREDIT1 = 34	CREDIT5 = 38
CASH2 = 32	CREDIT2 = 35	CREDIT6 = 39
CHEQUE = 33	CREDIT3 = 36	CREDIT7 = 40
	CREDIT4 = 37	CREDIT8 = 41

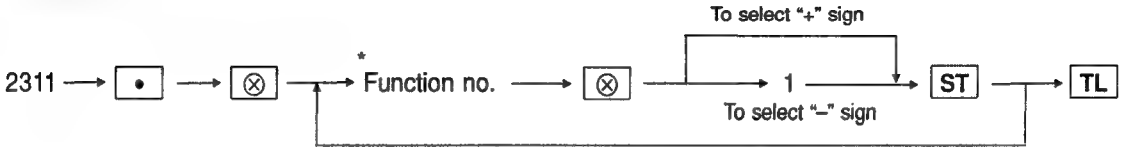
** A: Footer printing enable/disable = 1/0
B: Non-add code entry compulsory/non-compulsory = 1/0
C: Change disable/enable = 1/0
D: Validation printing compulsory/non-compulsory = 1/0
E: Drawer opening disable/enable = 1/0
F: Tendering compulsory/non-compulsory (for CASH, CASH2, and CHEQUE)= 1/0
compulsory/prohibit (for CREDIT1 to CREDIT8) = 1/0

Example:

Key operation	Print
2320 [•] [⊗]	#2320 *PGM2*
31 [⊗] [ST]	F31 CASH L18
34 [⊗] 1011 [ST]	000000
[TL]	F34 CREDIT1 L18 — A through F
	001011

(4) Programming of sign (for %, ⊖) (PGM2 mode)

Procedure



* Function no.:

⊖ 1 = 1 ⊖ 2 = 2

%1 = 3 %2 = 4 %3 = 5 %4 = 6

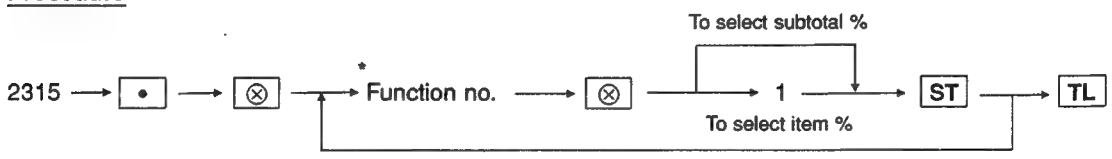
Example:

Key operation	Print
2311 • ⊗	#2311 *PGM2*
1 ⊗ 1 ST	F01 (–) 1 0
3 ⊗ 1 ST	1 L17
TL	F03 %1 0
	-10.00%
	L100.00%

Discount

(5) Item % or subtotal % selection (PGM2 mode)

Procedure



* Function no.:

%1 = 3 %2 = 4 %3 = 5 %4 = 6

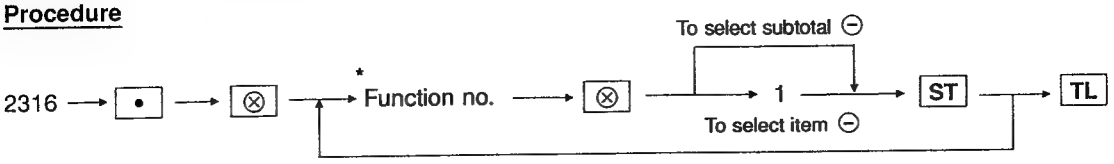
Example:

Key operation	Print
2315 • ⊗	#2315 *PGM2*
3 ⊗ 1 ST	F03 %1 1
TL	-10.00%
	L100.00%

Item %

(6) Item ⊖ or subtotal ⊖ selection (PGM2 mode)

Procedure



* Function no.:
⊖ 1 = 1 ⊖ 2 = 2

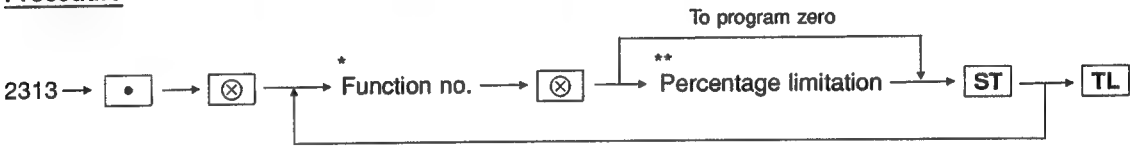
Example:

Key operation			Print
2316	•	⊗	#2316 *PGM2*
1	⊗ 1	ST	F01 (-) 1 1 — Item ⊖
		TL	1 L17

(7) Programming of HALO for percent calculation (PGM2 mode)

Your machine allows you to program the upper limit for percent calculation.

Procedure



* Function no.:
%1 = 3 %2 = 4 %3 = 5 %4 = 6

** Percentage limitation: 0.00 through 100.00

Example:

Key operation			Print
2313	•	⊗	#2313 *PGM2*
3	⊗ 2000	ST	F03 %1 1
		TL	-10.00%
			L-20.00% — Percentage limit

(8) Programming of HALO for deduction, received on account, and paid out (PGM2 mode)

Your machine allows you to program the upper limit for deduction, received on account, and paid out.

Procedure

2312 → [•] → [⊗] → * Function no. → [⊗] → * Entry limitation → [ST] → [TL]

*

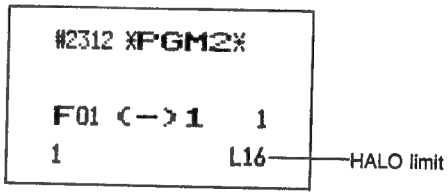
Function	Function no.	Entry limitation
⊖1	1	2 digits (AB) AB is the same as A x 10^B A : Significant digit (1 through 9) B : 0 through 7 (for ⊖1, ⊖2) : 0 through 8 (for RA, PO)
⊖2	2	
RA	28	
PO	29	

Example:

Key operation

2312 [•] [⊗]
1 [⊗] 16 [ST]
[TL]

Print



(9) Programming of HALO for the finalization keys (PGM2 mode)

Your machine allows you to program the upper limit for the finalization keys.

Procedure

2322 → [•] → [⊗] → * Function no. → [⊗] → * Entry limitation → [ST] → [TL]

*

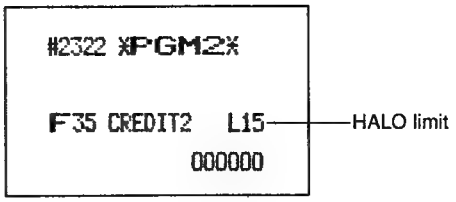
Function	Function no.	Entry limitation
CASH	31	2 digits (AB) AB is the same as A x 10^B A: Significant digit (1 through 9) B: 0 through 8
CASH2	32	
CHEQUE	33	
CREDIT 1	34	
CREDIT 2	35	
CREDIT 3	36	
CREDIT 4	37	
CREDIT 5	38	
CREDIT 6	39	
CREDIT 7	40	
CREDIT 8	41	

Example:

Key operation

2322 [•] [⊗]
35 [⊗] 15 [ST]
[TL]

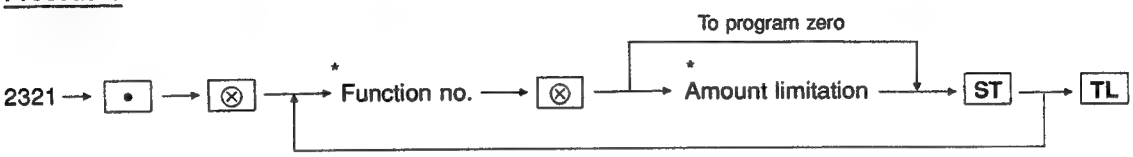
Print



(10) Programming of HALO for cash in drawer, cheque change, and cheque cashing (PGM2 mode)

Your machine allows you to program the upper limit for cash in drawer, cheque change, and cheque cashing.

Procedure



*

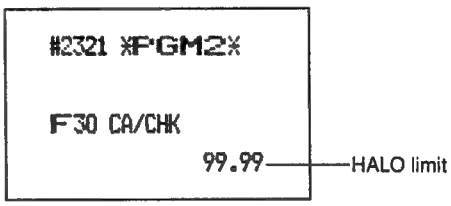
Function	Function no.	Amount limitation
CID (sentinel amount)	49	max. 9 digits 0.00 through 9999999.99
Cheque change	52	max. 8 digits 0.00 through 999999.99
Cheque cashing	30	

Example:

Key operation

2321 [•] [⊗]
30 [⊗] 9999 [ST]
[TL]

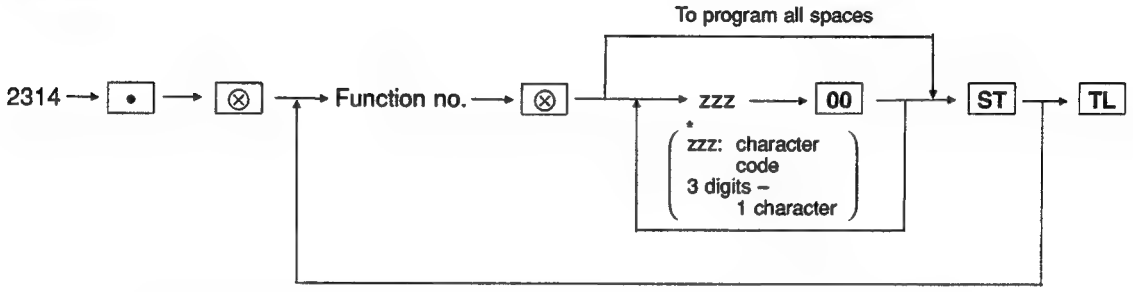
Print



(11) Programming of function text (PGM2 mode)

You can program a maximum of 8 characters for each function by using the "LIST OF FUNCTION TEXTS" shown on the next page.

Procedure



* Character code: See "ALPHANUMERIC CHARACTER CODE TABLE" (page 20).

Example: Programming the "CASH" for cash function with the letter "C" being double size

Key operation	Print
2314 • ⊗ 31 ⊗ 253 00 067 00 065 00 083 00 072 00 ST TL	#2314 *PGM2* F31 CASH L18 000000

LIST OF FUNCTION TEXTS

Function no.	Function	Default text
1	⊖ 1	(—) 1
2	⊖ 2	(—) 2
3	% 1	% 1
4	% 2	% 2
5	% 3	% 3
6	% 4	% 4
7	DIFFER	DIFFER
8	TAXABLE 1 SUBTOTAL	TAX1 ST
9	TAXABLE 2 SUBTOTAL	TAX2 ST
10	TAXABLE 3 SUBTOTAL	TAX3 ST
11	TAXABLE SUBTOTAL	TAX ST
12	VAT/TAX 1	VAT 1
13	VAT/TAX 2	VAT 2
14	VAT/TAX 3	VAT 3
15	VAT/TAX	VAT
16	NET 1	NET 1
17	NET 2	NET 2
18	COUPON-LIKE PLU	CP PLU
19	REFUND	REFUND
20	∽	∽
21	∽ MODE TOTAL	∽ MODE
22	MGR ∽	MGR ∽
23	SUBTOTAL ∽	SBTL ∽
24	HASH ∽	HASH ∽
25	HASH REFUND	HASH RF
26	VP COUNTER	VP CNT
27	NO SALE	NO SALE
28	RA	***RA
29	PO	***PO
30	CHEQUE CASHING	CA/CHK
31	CASH	CASH
32	CASH 2	CASH2
33	CHEQUE	CHECK
34	CREDIT 1	CREDIT1
35	CREDIT 2	CREDIT2

Function no.	Function	Default text
36	CREDIT 3	CREDIT3
37	CREDIT 4	CREDIT4
38	CREDIT 5	CREDIT5
39	CREDIT 6	CREDIT6
40	CREDIT 7	CREDIT7
41	CREDIT 8	CREDIT8
42	EXCHANGE 1	EXCH1
43	EXCHANGE 2	EXCH2
44	EXCHANGE 3	EXCH3
45	EXCHANGE 4	EXCH4
46	EXCHANGE 1 IS	EXCH1 IS
47	EXCHANGE 2 IS	EXCH2 IS
48	EXCHANGE 3 IS	EXCH3 IS
49	CASH IN DRAWER	****CID
50	CASH/CHEQUE IS	CA/CH IS
51	CASH/CHEQUE IN DRAWER	CA/CH ID
52	CHEQUE/CHANGE	CHK/CG
53	CUSTOMER	GUEST
54	PAID TOTAL	PAID TL
55	DOMESTIC CURRENCY 1	DOM.CUR1
56	DOMESTIC CURRENCY 2	DOM.CUR2
57	DOMESTIC CURRENCY 3	DOM.CUR3
58	DOMESTIC CURRENCY 4	DOM.CUR4
59	CHEQUE IN DRAWER	*CH ID
60	(+)DEPT TTL	*DEPT TL
61	(–)DEPT TTL	DEPT (–)
62	BOTTLE DEPOSIT TTL	*BTTL TL
63	BOTTLE RETURN TTL	BTTL (–)
64	HASH(+) TTL	*HASH TL
65	HASH(–) TTL	HASH (–)
66	NET 1(TAXABLE 1 – VAT 1)	NET 1
67	NET 2(TAXABLE 2 – VAT 2)	NET 2
68	NET 3(TAXABLE 3 – VAT 3)	NET 3
69	NET (TAXABLE – VAT)	NET
70	SUBTOTAL	SUBTOTAL
71	MERCHANDIZE SUBTOTAL	MDSE ST

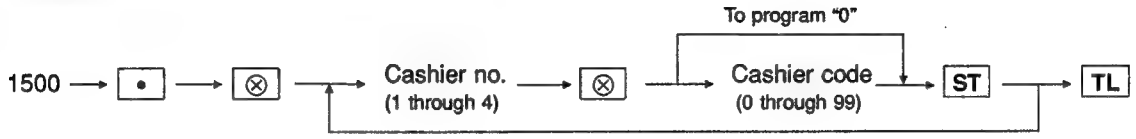
Function no.	Function	Default text
72	TOTAL	***TOTAL
73	CHANGE	CHANGE
74	SALES Q'TY	ITEMS
75	COPY RECEIPT TITLE	COPY
76	AVERAGE	AVE.
77	GROUP1	GROUP01
78	GROUP2	GROUP02
79	GROUP3	GROUP03
80	GROUP4	GROUP04
81	GROUP5	GROUP05
82	GROUP6	GROUP06
83	GROUP7	GROUP07
84	GROUP8	GROUP08
85	GROUP9	GROUP09
86	CCD	CCD
87	CCD DIFFER	CCD DIF.
88	CCD DIFFER TOTAL	DIF. TL
89	DEPT REPORT TITLE	DEPT
90	GROUP REPORT TITLE	GROUP
91	PLU REPORT TITLE	PLU
92	TRANSACTION REPORT TITLE	TRANS.
93	CID REPORT TITLE	TL-ID
94	CASHIER REPORT TITLE	CASHIER
95	HOURLY REPORT TITLE	HOURLY
96	TOTAL TAX	TTL TAX
97	NET WITHOUT TAX	NET

7. Cashier programming

(1) Cashier code definition (PGM1 or PGM2 mode)

You can assign a cashier code to each of 4 cashiers.

Procedure



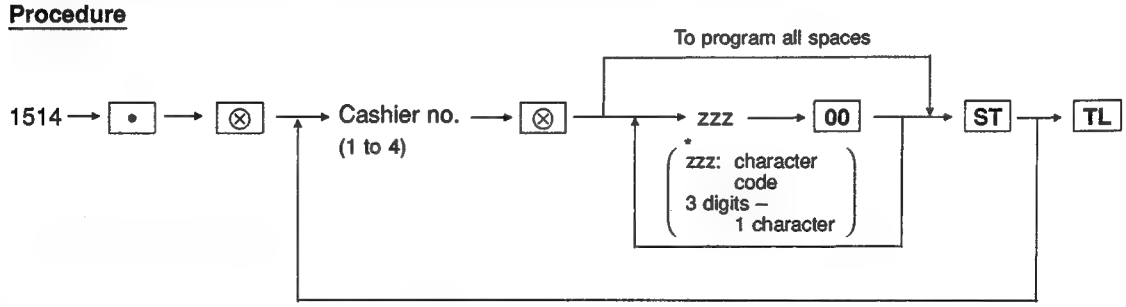
Example:

Key operation	Print
1500 • ⊗	#1500 XPGM2X
1 ⊗ 11 ST	01CSR# 11 (Cashier no.)
4 ⊗ 14 ST	D1 (Cashier code)
TL	04CSR# 14
	D1

(2) Programming of the cashier name (PGM1 or PGM2 mode)

You can program a maximum of 8 characters for each cashier.

Procedure



* Character code: See "ALPHANUMERIC CHARACTER CODE TABLE" (Page 20).

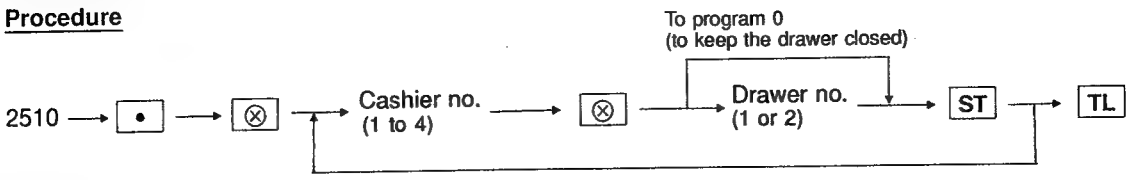
Example: Programming "MEYER" for cashier no. 1

Key operation	Print
1514 • ⊗	#1514 XPGM2X
1 ⊗	01CSR# 11
077 00 069 00 089 00	MEYER D1 (Cashier name)
069 00 082 00 ST	
TL	

(3) Programming drawer numbers for cashiers

You can assign drawers available to individual cashiers.

Procedure



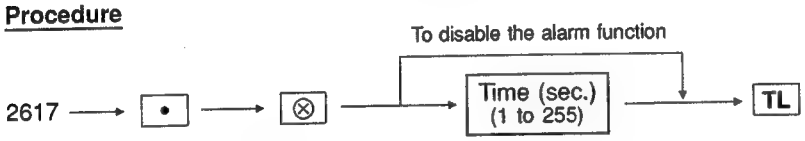
Example:

Key operation	Print
2510 • ⊗ 1 ⊗ 1 ST TL	#2510 *PGM2* 01CSR# 11 MEYER D1 — Drawer no.

8. Programming alarm length of time with drawer opening (PGM2 mode)

If the drawer still remains open when a specified length of time has elapsed, your machine gives the alarm.

Procedure



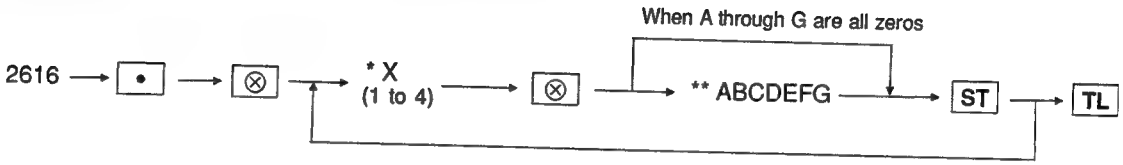
Example:

Key operation	Print
2617 • ⊗ 30 TL	#2617 *PGM2* 030

Note: Your machine starts to monitor how long the drawer is kept open the moment the drawer is opened at the end of a transaction in the REG/VOID mode. It stops the time monitoring when a valid key (except the VP and RCPT keys) is pressed for the next transaction. It restarts the time monitoring after that transaction is ended. You can stop the buzzer alarm by closing the drawer. No key entries can be made while the buzzer is sounding.

9. Programming for optional feature selection (PGM2 mode)

Procedure



* When X is 1:

**

Item	Description		Entry
A	OP X/Z report	Enable	0
		Disable	1
B	Paid out in the REG mode	Enable	0
		Disable	1
C	Refund in the REG mode	Enable	0
		Disable	1
D	Direct void in the REG mode	Enable	0
		Disable	1
E	Indirect void in the REG mode	Enable	0
		Disable	1
F	Subtotal void in the REG mode	Enable	0
		Disable	1
G	Refund validation printing	Non-compulsory	0
		Compulsory	1

* When X is 2:

**

Item	Description		Entry
B	The first item direct void	Enable	0
		Disable	1
C	Printing of the number of purchased items	No	0
		Yes	1
E	Journal print form	Detailed	0
		Limited*	1
F	Item validation printing	Enable	0
		Disable	1
G	⊖ validation printing	Non-compulsory	0
		Compulsory	1

A and D: Not used (Enter 0 or nothing for A and D.)

*Note: When 1 is entered ("limited" is selected), plus (+) department and plus (+) PLU/sub-dept. are not printed.

* When X is 3:

**

Item	Description		Entry
C	Zero skip in cashier report	Yes	0
		No	1
D	Zero skip in transaction report	Yes	0
		No	1
E	Zero skip in department report	Yes	0
		No	1
F	Zero skip in PLU report	Yes	0
		No	1
G	Zero skip in hourly report	Yes	0
		No	1

A and B: Not used (Enter 0 or nothing for A and B.)

* When X is 4:
**

Item	Description		Entry
E	VAT amount printing on the receipt	Yes	0
		No	1
F	Taxable amount printing on the receipt	Yes	0
		No	1
G	Net amount printing on the receipt	Yes	0
		No	1

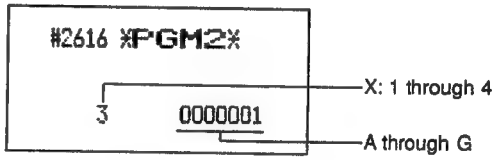
A, B, C and D: Not used (Enter 0 or nothing for A, B, C and D.)

Example:

Key operation

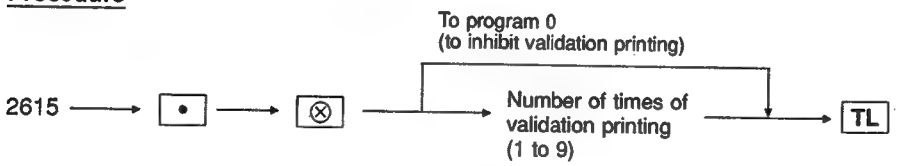
2616 [•] [⊗]
3 [⊗] 1 [ST]
[TL]

Print



10. Programming the number of times of validation printing (PGM2 mode)

Procedure

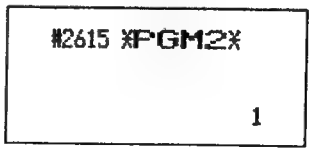


Example:

Key operation

2615 [•] [⊗]
1 [TL]

Print

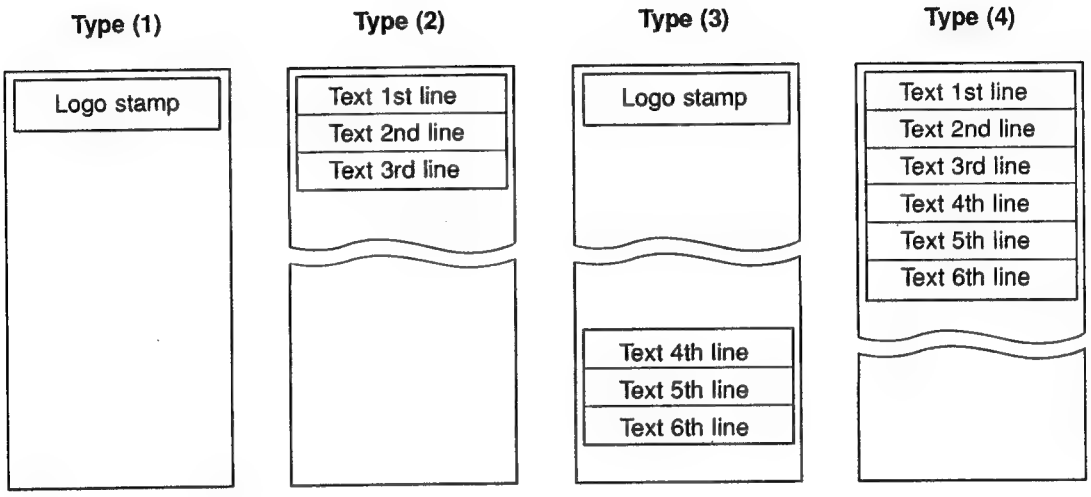


11. Logo text programming (PGM2 mode)

Your machine can print logo messages in the following four manners. The standard model provides no message line; it allows stamping only. If you need the printing of programmed messages, please consult your dealer.

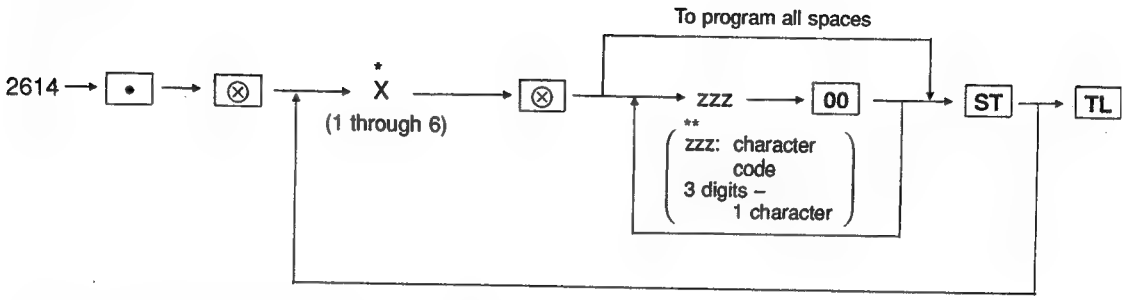
(1) No logo message printed (logo stamp only)
(2) 3-line logo message (header) instead of logo stamp
(3) 3-line logo message (footer) and logo stamp
(4) 6-line logo message (header) instead of logo stamp

Print positions on the receipt



Note) Up to 18 characters can be programmed per line.

Procedure



*X: Line number for logo message (1 through 6)
**Character code: See "ALPHANUMERIC CHARACTER CODE TABLE" (page 20).

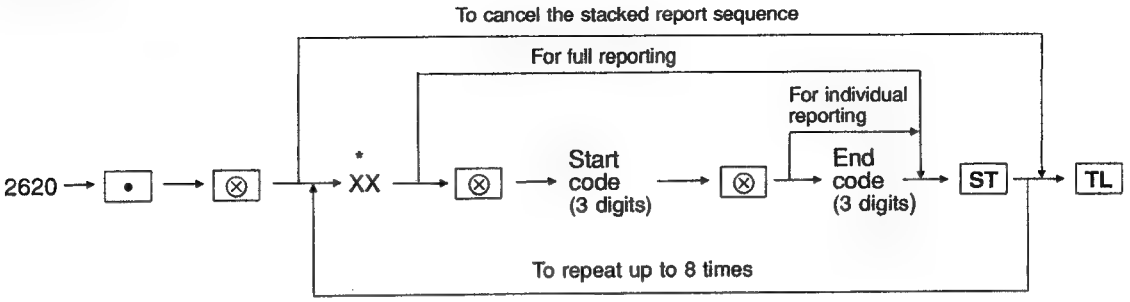
Example: Programming the logo message "✱MESSAGE✱"
(Assuming you are in type 3)

Key operation	Print
2614 • ⊗	#2614 *PGM2*
4 ⊗	✱MESSAGE✱
224 00	
253 00 077 00	
253 00 069 00	
253 00 083 00	
253 00 083 00	
253 00 065 00	
253 00 071 00	
253 00 069 00	
224 00 ST	
5 ⊗	
ST	
6 ⊗	
ST	
TL	

12. Selection of X1/Z1 and X2/Z2 reports to be printed in the stacked report sequence (PGM2 mode)

Your register is equipped with the stacked report printing function that enables multiple X/Z reports to be printed in sequence with only a single request, up to 8 reports. This function continuously prints a maximum of 8 kinds of reports with a single operation.

Procedure



*: Maximum 13 steps are programmable. "1 step" means the memory size used for one no-range type job no. The range type job no. needs "6 steps" (range PLU report).

* XX: Report job number

Job no.	Report	Start code and end code
00	General report	
10	Full department report	
13	Group total report	
20	Range PLU report	Start PLU code/end PLU code (1 through 999)
30	Transaction report	
31	Total in drawer report	
50	Full cashier report	
60	Hourly report	

Example:

Key operation

2620 • ⊗
10 ST
13 ST
TL

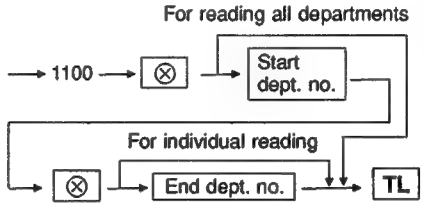
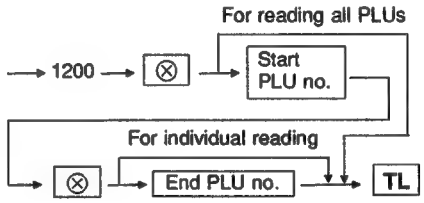
Print

#2620 *PGM2*
10
13

13. Reading stored programs

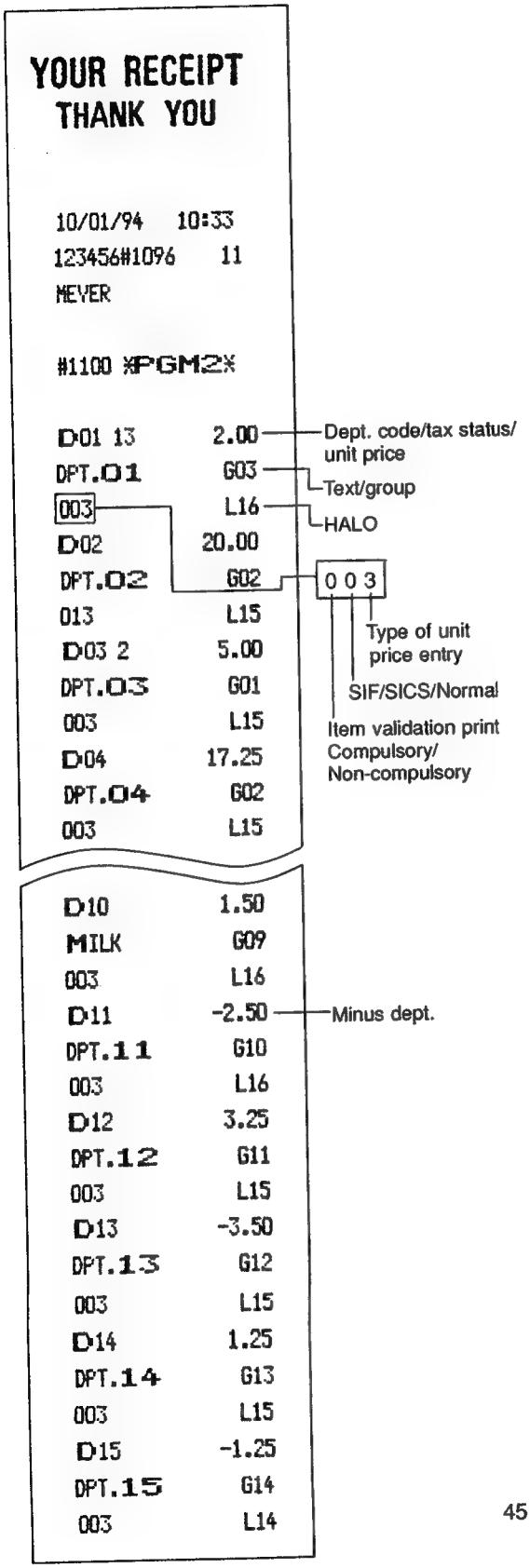
Your machine allows you to read every program stored in the PGM1 and PGM2 modes.

(1) Program details and procedures for their reading

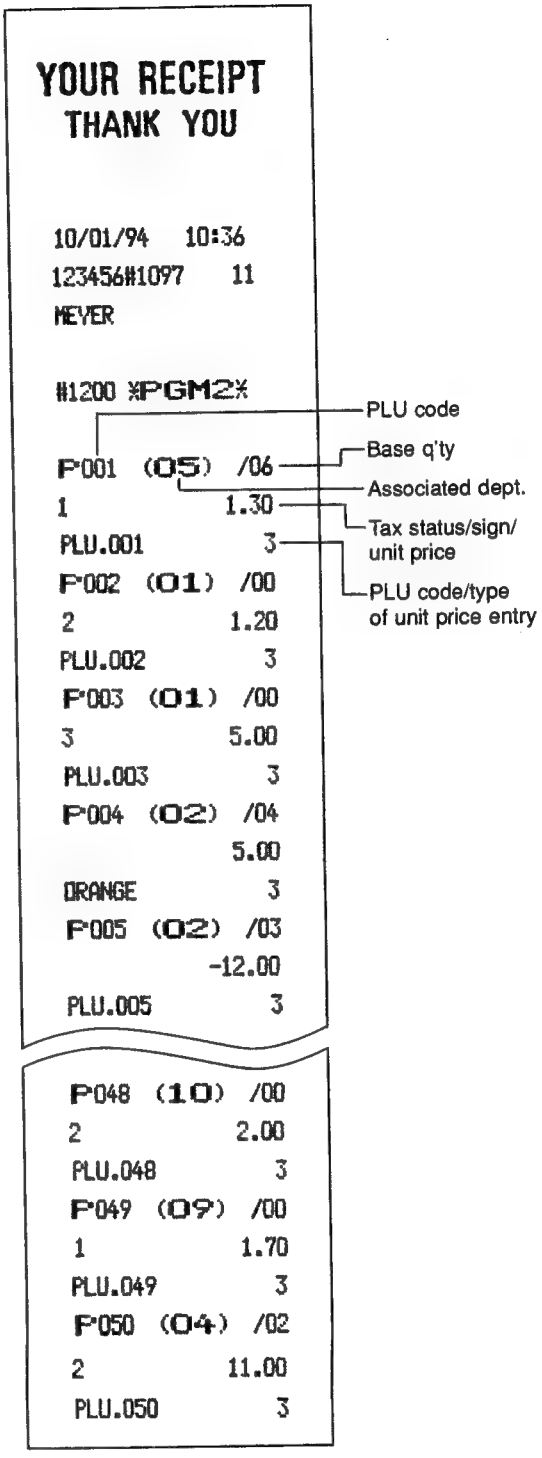
Program for:	Mode switch position	Job code no.	Procedure	Related job code nos.
① Departments	PGM2 or PGM1	1100		1110, 2110, 2111, 2112, 2114, 2116
② PLUs/ subdepartments	PGM2 or PGM1	1200		1200, 1210, 1211, 2211, 2214
③ Cashiers	PGM2 or PGM1	1500		1500, 1514, 2510
④ Miscellaneous presets	PGM2 or PGM1	2600		2614, 2615, 2616, 2617, 2620
⑤ Function preset	PGM2 or PGM1	1300		1310, 2311, 2312, 2313, 2314, 2315, 2316, 2320, 2321, 2322
⑥ Tax rate	PGM2	2700		2711
⑦ Auto key preset	PGM2	2900		2900

(2) Sample printouts

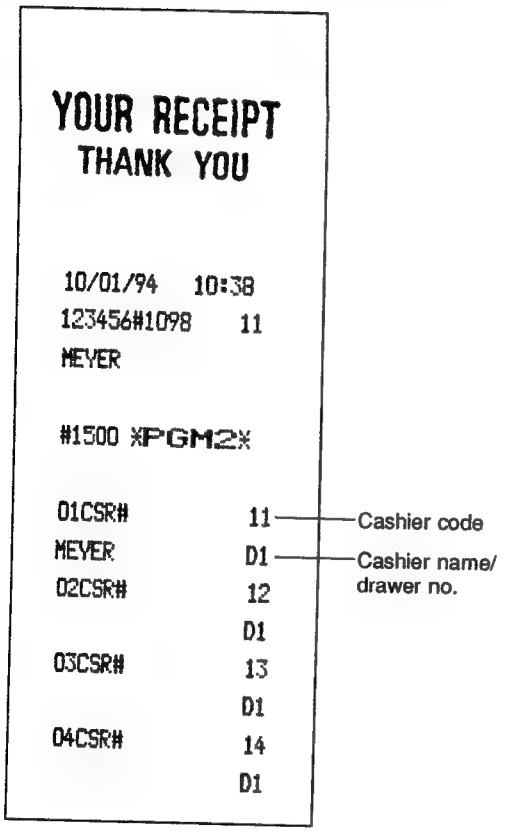
① Reading of programmed items for departments
(Reading in the PGM1 and PGM2 modes)



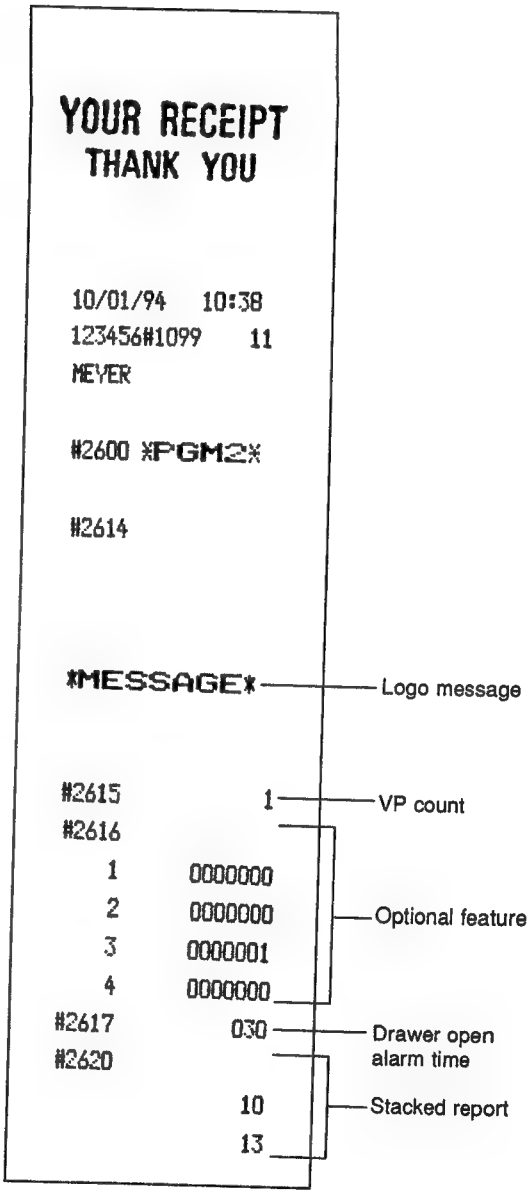
② Reading of programmed items for PLUs/subdepartments
(Reading in the PGM1 and PGM2 modes)



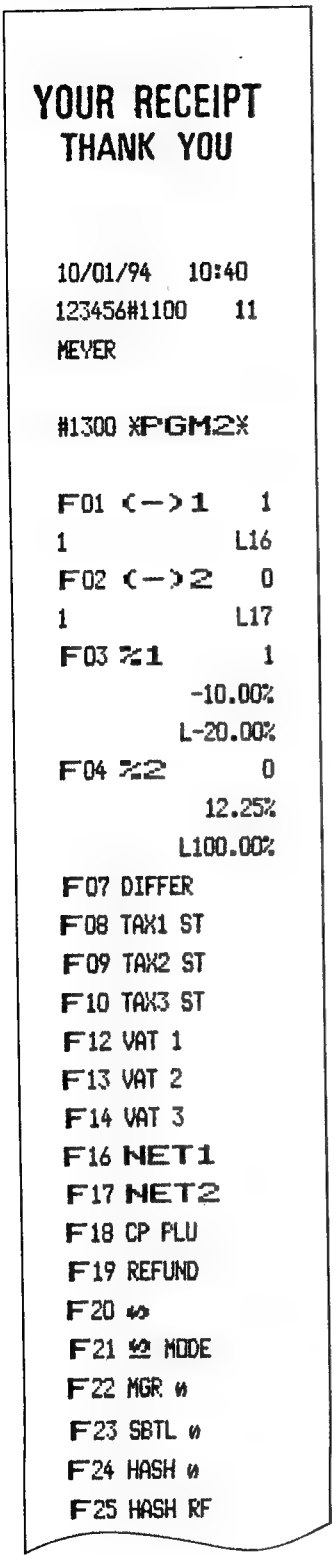
③ Reading of programmed items for cashiers
(Reading in the PGM1 and PGM2 modes)



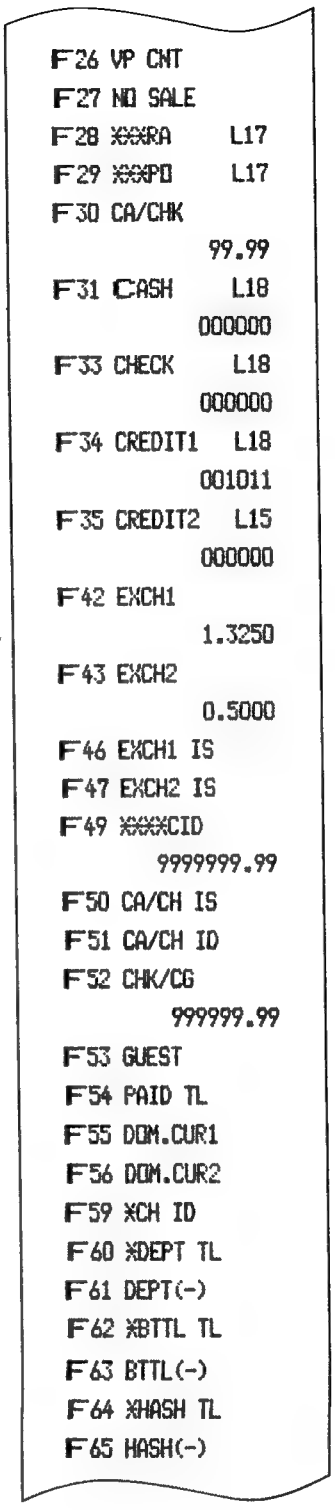
④ Reading of miscellaneous presets
(Reading in the PGM1 and PGM2 modes)



⑤ Reading of programmed items for functions
(Reading in the PGM1 and PGM2 modes)



```
YOUR RECEIPT
THANK YOU

10/01/94   10:40
123456#1100    11
MEYER

#1300 XPGM2X

F01 <->1       1
1              L16
F02 <->2       0
1              L17
F03 %1         1
            -10.00%
           L-20.00%
F04 %2         0
            12.25%
           L100.00%
F07 DIFFER
F08 TAX1 ST
F09 TAX2 ST
F10 TAX3 ST
F12 VAT 1
F13 VAT 2
F14 VAT 3
F16 NET1
F17 NET2
F18 CP PLU
F19 REFUND
F20 ##
F21 #2 MODE
F22 MGR #
F23 SBTL #
F24 HASH #
F25 HASH RF
```



```
F26 VP CNT
F27 NO SALE
F28 XXXRA      L17
F29 XXXPO      L17
F30 CA/CHK
              99.99
F31 CASH       L18
             000000
F33 CHECK      L18
             000000
F34 CREDIT1    L18
             001011
F35 CREDIT2    L15
             000000
F42 EXCH1
              1.3250
F43 EXCH2
              0.5000
F46 EXCH1 IS
F47 EXCH2 IS
F49 XXXXCID
         9999999.99
F50 CA/CH IS
F51 CA/CH ID
F52 CHK/CG
          999999.99
F53 GUEST
F54 PAID TL
F55 DOM.CUR1
F56 DOM.CUR2
F59 XCH ID
F60 XDEPT TL
F61 DEPT(-)
F62 XBTTL TL
F63 BTTL(-)
F64 XHASH TL
F65 HASH(-)
```

To be continued on the next page

```
F66 NET 1
F67 NET 2
F68 NET 3
F70 SUBTOTAL
F71 MDSE ST
F72 XXXTOTAL
F73 CHANGE
F74 ITEMS
F75 COPY
F76 AVE.
F77 GROUP01
F78 GROUP02
F79 GROUP03
F80 GROUP04
F81 GROUP05
F82 GROUP06
F83 GROUP07
F84 GROUP08
F85 GROUP09
F86 CCD
F87 CCD DIF.
F88 DIF. TL
F89 DEPT
F90 GROUP
F91 PLU
F92 TRANS.
F93 TL-ID
F94 CASHIER
F95 HOURLY
F96 TTL TAX
F97 NET
```

⑥ Reading of programmed tax rate
(Reading in the PGM2 mode)

```
YOUR RECEIPT
THANK YOU

10/01/94   10:40
123456#1101    11
NEVER

#2700 XPGM2X

TAX 1      3.0000%
             0.10
TAX 2      7.0000%
             0.12
TAX 3      4.0000%
             0.10
```

Tax no./Tax rate

Lowest taxable amount

REGISTRATIONS

* Preparations for entries

(1) Put the operator key in the mode switch and turn it to the REG position.
(2) Check to see if your register has both the journal and receipt rolls. If your register lacks these rolls or has low rolls, install new paper rolls or replace the old rolls with new ones according to "4. Installing and removing the paper roll" under "OPERATOR MAINTENANCE".

* Error warning

In the following examples, your register will go into an error state accompanied with a warning beep and the error message "E" on the display. Clear the error state by pressing the [CL] key and take a proper action.

(1) When you enter an over 16-digit number (entry limit overflow):
- Cancel the entry and re-enter a correct number.

(2) When you make an error in key operation:
- Clear the error and operate keys correctly.

(3) When you make an entry beyond a programmed amount entry limit:
- Check to see if the entered amount is correct. If it is correct, it can be rung up in the MGR mode. Contact your manager.

(4) When a subtotal exceeds eight digits:
- Clear the subtotal and press the [TL], [CA2], [CH], [CR1] ~ [CR8] or [EX1] ~ [EX4] key to finalize the transaction.

1. Cashier assignment

Cashiers can be assigned by entering a cashier code programmed in job #1500. Prior to item entry, the cashier can enter his or her cashier code for every transaction. However, this may not be necessary where the same cashier code is used in the next transaction.

Procedure

XX ——→ [CASH]
(Cashier code)

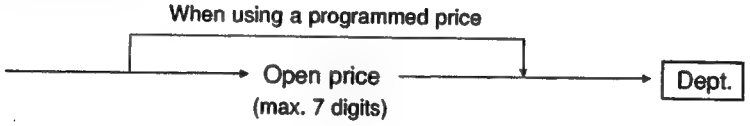
Note: When the [CASH] key is pressed without entering any cashier code, a currently specified cashier code is displayed.

2. Item entries

(1) Single item entries

- **Entries into departments**
  Enter a unit price and press a department key. If you use a programmed unit price, press a department key only.

Procedure



Open price: Less than a programmed upper limit

Example:

Key operation	Print
1200 [8]	10/01/94 8:38
[6]	123456#1102 11
[TL]	MEYER
	DPT.08 ¥12.00
	DPT.06 ¥3.20
	CASH ¥15.20

Note: When those departments for which the unit price has been programmed as 0 (zero) are entered by using preset unit price, the quantity alone is added.

- **PLU entries**
  Enter a PLU number and press the [PLU/SUB] key.

Procedure

Example:

Key operation	Print
2 [PLU/SUB]	PLU.002 ¥1.20
[TL]	CASH ¥1.20

Note: When those PLUs for which the unit price has been programmed as 0 (zero) are entered, the quantity alone is added.

- **Subdepartment (open PLU) entries**
  Follow this sequence:

Procedure

→ Open price → [AMT] → PLU code → [PLU/SUB]
(max. 7 digits)

Open price: Less than a programmed upper limit

Example:

Key operation	Print
1275 [AMT]	PLU.010 ¥12.75
10 [PLU/SUB]	CASH ¥12.75
[TL]	

(2) Repeat entries

You can use this function for entering two or more same items.

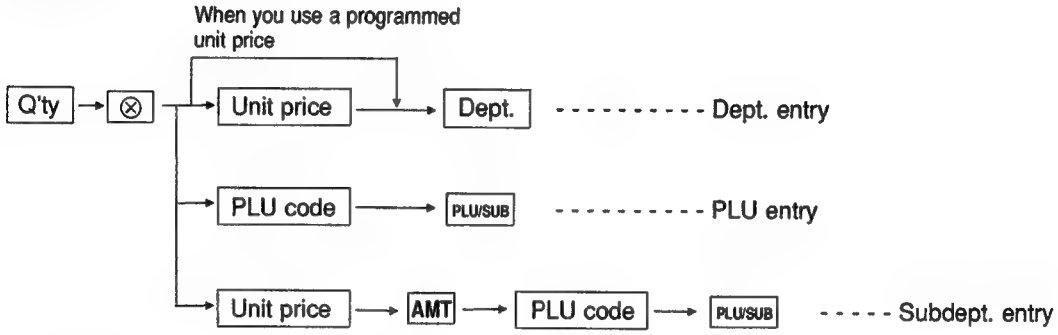
Example:

Key operation	Print
Repeated department entry → 200 [3]	DPT.03 ¥2.00
3	DPT.03 ¥2.00
3	DPT.03 ¥2.00
Repeated PLU entry → 10 [PLU/SUB]	PLU.010 ¥30.00
[PLU/SUB]	PLU.010 ¥30.00
[PLU/SUB]	PLU.010 ¥30.00
Repeated subdepartment entry → 285 [AMT]	PLU.006 ¥2.85
6 [PLU/SUB]	PLU.006 ¥2.85
[PLU/SUB]	
[TL]	CASH ¥101.70

(3) Multiplication entries

Use this feature when you need to enter two or more same items.
This feature helps when you enter a large quantity of items or need to enter quantities that contain decimals.

Procedure

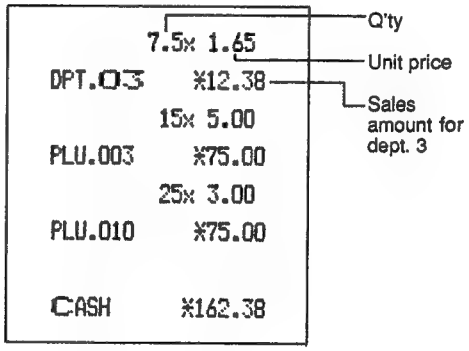


- Q'ty: up to seven digits (4-digit integer + 3-digit decimal)
- Unit price: less than a programmed upper limit (max. 999999)
- Q'ty x unit price: up to seven digits

Example:

Key operation		
Dept. entry	7 • 5 ⊗	
	165 3	
PLU entry	15 ⊗	
	3 PLU/SUB	
Subdepartment entry	25 ⊗	
	300 AMT	
	10 PLU/SUB	
	TL	

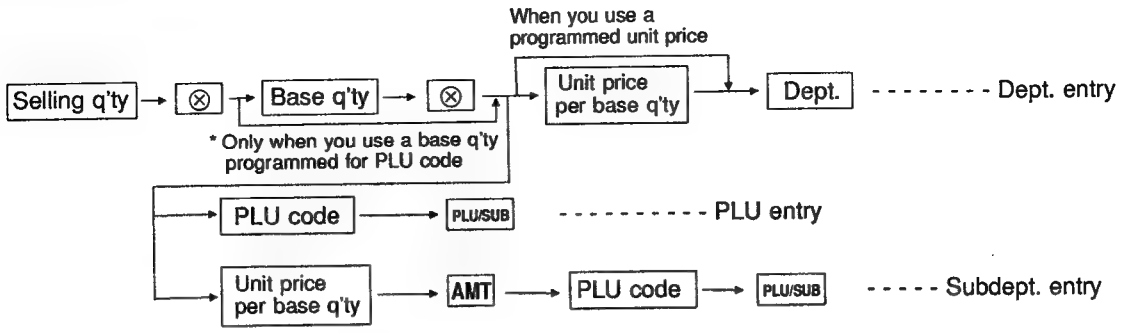
Print



(4) Split-pricing entries

You will use this function when your customer wants to purchase more or less than the base quantity of a loose item.

Procedure



- Selling quantity: up to seven digits (4-digit integer + 3- digit decimal)
- Base quantity: up to two digits (integer)

* Note: You can't skip the base quantity entry when you enter department items.

Example:

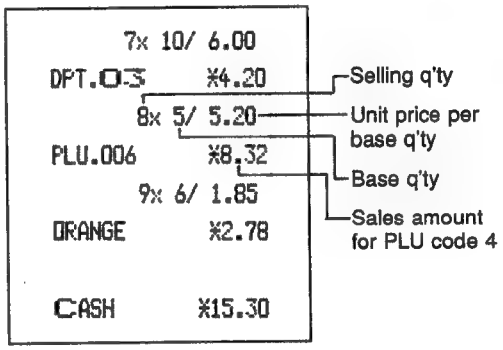
Key operation

Department entry using the split-pricing entry function →
7 ⊗
10 ⊗
600 3

PLU entry using the split-pricing entry function →
8 ⊗
5 ⊗
6 PLU/SUB

Subdepartment entry using the split-pricing entry function →
9 ⊗
6 ⊗
185 AMT
4 PLU/SUB
TL

Print



(5) Single item cash sale (SICS)/single item finalize (SIF) entries

① SICS entries

- This function is useful when a sale is for only one item and is for cash; such as a pack of cigarettes. This function is applicable only to those departments that have been set for SICS or to their associated PLUs.
- The transaction is finalized and the drawer opens as soon as you press the department key or [PLU/SUB] key.

Example:

Key operation	
	2800
For finishing the transaction →	[2]

Print	
DPT.02	¥28.00
CASH	¥28.00

Note: If a ring-up to a department or PLU set for SICS follows the ones to departments or PLUs not set for SICS, it does not finalize and results in a normal sale.

② SIF entries

- If a ring-up to a department or PLU/subdepartment set for SIF follows the ones to departments or PLUs/subdepartments not set for SIF, the transaction is finalized immediately as a cash sale.
- Like the SICS function, this function is available for single-item cash settlement.

Example:

Key operation	
	1745 [8]
	450
For finalizing the transaction →	[9]

Print	
DPT.08	¥17.45
DPT.09	¥4.50
CASH	¥21.95

3. Display of subtotals

Press the [ST] key at any point during a transaction. Then the machine state symbol "□" and the subtotal will appear in the display and the "ST" lamp will light up.

4. Finalization of transaction

(1) Cash or cheque tendering

Press the [ST] key to get a subtotal, enter the amount tendered by your customer, then press the [TL] key if it is a cash tender or press the [CH] key if it is a cheque tender.
When the amount tendered is greater than that amount of the sale, your register will show the change due amount. Otherwise your register will show a deficit.

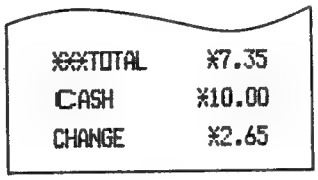
Example:

- **Cash tendering**

Key operation

[ST]
1000 [TL]

Print

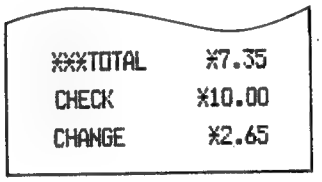


- **Cheque tendering**

Key operation

[ST]
1000 [CH]

Print



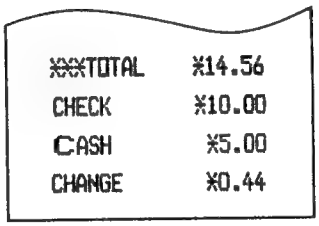
(2) Mixed tendering (cheque + cash)

Example:

Key operation

[ST]
1000 [CH]
500 [TL]

Print



(3) Cash or cheque sale that does not need a tender amount entry

Enter items and press the [TL] key if it is a cash sale or press the [CH] key if it is a cheque sale. Your register will display the total sale amount.

Example:

Key operation	Print
300 [1]	DPT.01 ¥3.00
2 [PLU/SUB]	PLU.002 ¥1.20
[TL]	CASH ¥4.20

In the case of cheque sale

Print
CHECK ¥4.20

(4) Credit sale

Enter items and press the credit key.

Example:

Key operation	Print
2500 [1]	DPT.01 ¥25.00
3250 [2]	DPT.02 ¥32.50
[CR2]	CREDIT2 ¥57.50

(5) Mixed-tender sale (cash or cheque tendering + credit sale)

Example:

Key operation	Print
[ST]	※※TOTAL ¥49.50
950 [TL]	CASH ¥9.50
[CR2]	CREDIT2 ¥40.00

Note: For cheque tendering, press the [CH] key instead of the [TL] key.

5. Computation of VAT (Value Added Tax)/tax

The machine may be programmed for the following six tax systems by your dealer.

① Automatic VAT 1, 2, 3 system (Automatic operation method using programmed percentages)
This system, at settlement, calculates VAT for taxable 1, taxable 2, and taxable 3 subtotals by using the corresponding programmed percentages.

② Automatic tax 1, 2, 3 system (Automatic operation method using programmed percentages)
This system, at settlement, calculates taxes for taxable 1, taxable 2, and taxable 3 subtotals by using the corresponding programmed percentages, and also adds the calculated taxes to those subtotals, respectively.

③ Manual VAT 1, 2, 3 system (Manual entry method using programmed percentages)

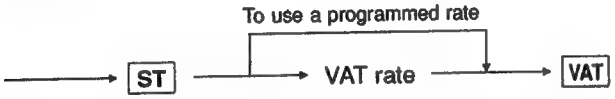
Procedure

→ [ST] → [VAT]

This system provides the VAT calculation for taxable 1, taxable 2, and taxable 3 subtotals. This calculation is performed using the corresponding programmed percentages when the [VAT] key is pressed just after the [ST] key.

④ Manual VAT 1 system (Manual entry method for subtotals that uses VAT 1 preset percentages)

Procedure



This system enables the VAT calculation for the then subtotal. This calculation is performed using the VAT 1 preset percentages when the [VAT] key is pressed just after the [ST] key. For this system, the keyed-in tax rate can be used.

⑤ Manual tax 1, 2, 3 system (Manual entry method using programmed percentages)

Procedure

→ [ST] → [VAT]

This system provides the tax calculation for taxable 1, taxable 2, and taxable 3 subtotals. This calculation is performed using the corresponding programmed percentages when the [VAT] key is pressed just after the [ST] key. After this calculation, you must finalize the transaction.

⑥ Automatic tax 1, 2, 3 system and VAT 1 system for Spain and Switzerland
In the case of Spain, these specific tax systems allow the calculation of amounts to be paid out for three types of taxes applicable in this country. These taxes are automatically added to the resulting subtotals 1–3. Moreover, in the case of Switzerland, the amount of value added tax – included in the resulting subtotal – is calculated separately.

In both cases the calculation is based on respective preprogrammed percentages.

Example:

Key operation	
(When the manual VAT 1, 2, 3 system is selected.)	550 [8]
	[ST]
	[VAT]
	[TL]

Print

DPT.08	¥5.50
SUBTOTAL	¥5.50
TAX1 ST	¥5.50
VAT 1	¥0.16
NET 1	¥5.34
CASH	¥5.50

6. Auxiliary entries

(1) Percent calculations (premium or discount)

- Your register provides the percent calculation for the subtotal of each item entry.
- Percentage: 0.01 to 100.00% (Less than a programmed upper limit)

1) Percent calculation for item entries

Example:

Key operation	
(When a discount of 10% is programmed for the [%] key)	800 [1]
	[%]
	3 [PLU/SUB]
	7 [•] 5 [%]
	[TL]

Print

DPT.01	¥8.00
	-10.00%
%1	-0.80
PLU.003	¥5.00
	-7.5%
%1	-0.38
CASH	¥11.82

2) Percent calculation for the subtotal

Example:

Key operation	
(When a premium of 10% is programmed for the [%2] key)	4 [⊗]
	140 [6]
	220 [7]
	[7]
	[ST]
	[%2]
	[TL]

Print

	4× 1.40
DPT.06	¥5.60
DPT.07	¥2.20
DPT.07	¥2.20
SUBTOTAL	¥10.00
	10.00%
%2	¥1.00
CASH	¥11.00

(2) Deduction

Your register allows you to deduct a certain amount less than a programmed upper limit after the entry of an item or the computation of a subtotal.

1) Deduction for item entries

Example:

Key operation	Print
850 [8]	DPT.08 ¥8.50
50 [⊖]	(−)1 -0.50
4700 [3]	DPT.03 ¥47.00
100 [⊖]	(−)1 -1.00
[TL]	CASH ¥54.00

2) Deduction for the subtotal

Example:

Key operation	Print
710 [6]	DPT.06 ¥7.10
500 [7]	DPT.07 ¥5.00
[ST]	(−)2 -0.25
25 [⊖2]	CASH ¥11.85
[TL]	

(3) Refund entries

For refund entry, press the [RF] key first and then the corresponding department key or the [PLU/SUB] key. Repeated or multiplied refund entries are also possible.

Example:

Key operation	Print
250 [RF] [1]	DPT.01 R-2.50
7 [⊗]	-7x 5.00
3 [RF] [PLU/SUB]	PLU.003 R-35.00
[TL]	CHANGE ¥37.50

(4) Printing of non-add code numbers

Enter a non-add code number such as a customer code number and credit card number within a maximum of 16 digits and press the [#/TM] key. The entry of a non-add code number can be made at any point during the entry of a sale. Your register will print it at once.

Example:

Key operation	Print
1230 [#/TM]	#0000000000001230
1500 [5]	DPT.05 ¥15.00
[TL]	CASH ¥15.00

7. Payment treatment

(1) Currency exchange

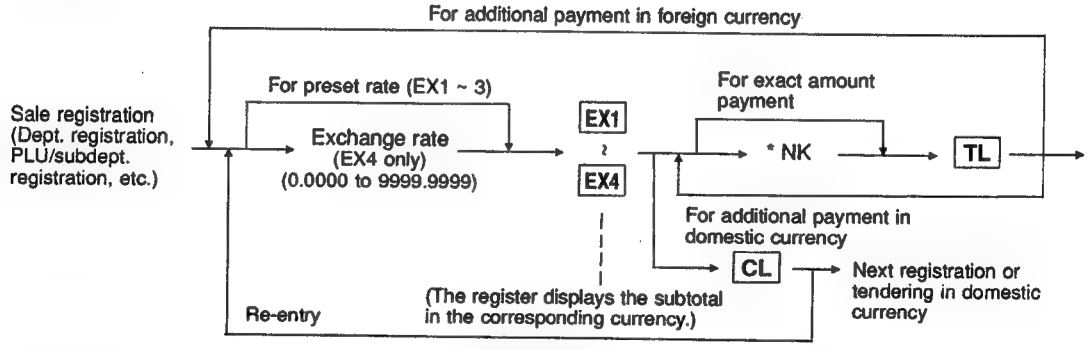
The register allows payment registrations in a maximum of four kinds of foreign currency.

EX1 to EX3 : Currency exchange can only be achieved by using a preset exchange rate when these keys are used.

EX4 : Currency exchange can only be achieved by using a keyboarded exchange rate when this key is used.

The [EX2] to [EX4] keys are options.

Procedure



* NK: Amount tendered in the corresponding currency (max. 8 digits)

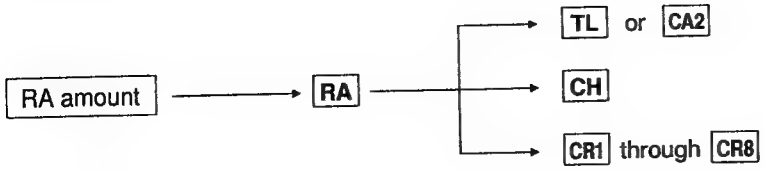
Example:

Key operation	Print
800 [1]	DPT.01 ¥8.00
200 [4]	DPT.04 ¥2.00
[EX1]	XXTOTAL ¥10.00
500 [TL]	EXCH1 0.4130
Amount tendered in foreign currency	4.13
	CASH 5.00
	CHANGE ¥2.10

Total in domestic currency
Exchange rate
Subtotal in foreign currency
Amount tendered in foreign currency
Change due amount in domestic currency

(2) Received on account entries

Procedure



Example:

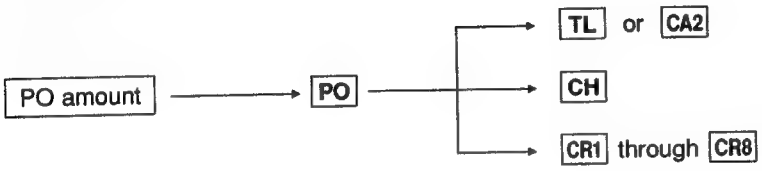
Key operation	
12345	#/TM
4800	RA
	CH

Print

```
#0000000000012345
CHECK
XXRA          ¥48.00
```

(3) Paid out entries

Procedure



Example:

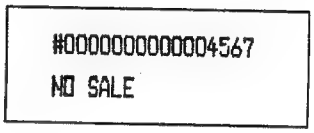
Key operation	
6789	#/TM
3000	PO
	TL

Print

```
#0000000000006789
CASH
XXPO          ¥30.00
```

(4) No sale (exchange)

Simply press the [NS] key without any entry. The drawer will open and the machine will print the "NO SALE" on both the journal and the receipt.



(5) Cashing a cheque

You can cash a cheque. Enter an amount, then press the [CH] key.

Example:

Key operation	Print
2000 [CH]	CA/CHK ¥20.00

CORRECTION

1. Correction of the last entry (direct void)

If you make any incorrect department, PLU/subdepartment, percentage, deduction, or refund entry by mistake, you can void this incorrect entry by pressing the [CS] key immediately after the incorrect entry.

Example:

Key operation	Print
130 [1]	DPT.01 ¥1.30
[CS]	DPT.01 ø-1.30
2 [PLU/SUB]	PLU.002 ¥1.20
[CS]	PLU.002 ø-1.20
600 [3]	DPT.03 ¥6.00
[%]	-10.00%
[CS]	%1 -0.60
	%1 ø%0.60
328 [4]	DPT.04 ¥3.28
28 [⊖]	(-)1 -0.28
[CS]	(-)1 ø%0.28
[TL]	CASH ¥9.28

2. Correction of the next-to-last or earlier entries (indirect void)

You can void any incorrect department, PLU/subdepartment, or refund entry made during a transaction by specifying it if you find it before finalizing the transaction (before making an amount tendered entry).

Example:

Key operation	Print
130 [1]	DPT.01 ¥1.30
1 [PLU/SUB]	PLU.001 ¥1.30
1750 [7]	DPT.07 ¥17.50
1 [CS] [PLU/SUB]	PLU.001 ø-1.30
130 [CS] [1]	DPT.01 ø-1.30
[TL]	CASH ¥17.50

3. Correction of the subtotal (subtotal void)

This function allows you to void an entire transaction that has not yet been finalized. When subtotal void is executed, the transaction is aborted and the register issues a receipt.

Example:

Key operation	Print
130 [1]	DPT.01 ¥1.30
1755 [2]	DPT.02 ¥17.55
10 [PLU/SUB]	PLU.010 ¥30.00
15 [PLU/SUB]	PLU.015 ¥8.50
825 [7]	DPT.07 ¥8.25
[ST]	SUBTOTAL ¥65.60
[CA]	SBTL M -65.60
[ST]	***TOTAL ¥0.00

4. Handling of errors found after receipt issuance

If you (as a cashier) find any errors after the entry of a whole transaction has been completed or while an amount tendered entry is being made, you cannot void them. Only your manager can do (refer to "CORRECTION AFTER FINALIZING A TRANSACTION"). You will take this step.

(1) If you are making an amount tendered entry, finalize the transaction.
(2) Make correct entries from the beginning.
(3) Hand the incorrect receipt to your manager for its cancellation.

SELECTION OF RECEIPT ISSUANCE

Your register usually prints on the journal and receipt in the REG mode (This is the "Receipt ON" state). When you want the register to permit printing on the journal alone without receipt, turn the mode switch to the OP X/Z position and press the [RCPT] key. The RCPT OFF lamp will light up (This is the "Receipt OFF" state). Then turn the mode switch to the "REG" position and start registration.
If you want the register to restore the "Receipt ON" state, press the [RCPT] key in the OP X/Z mode. The RCPT OFF lamp will go out.

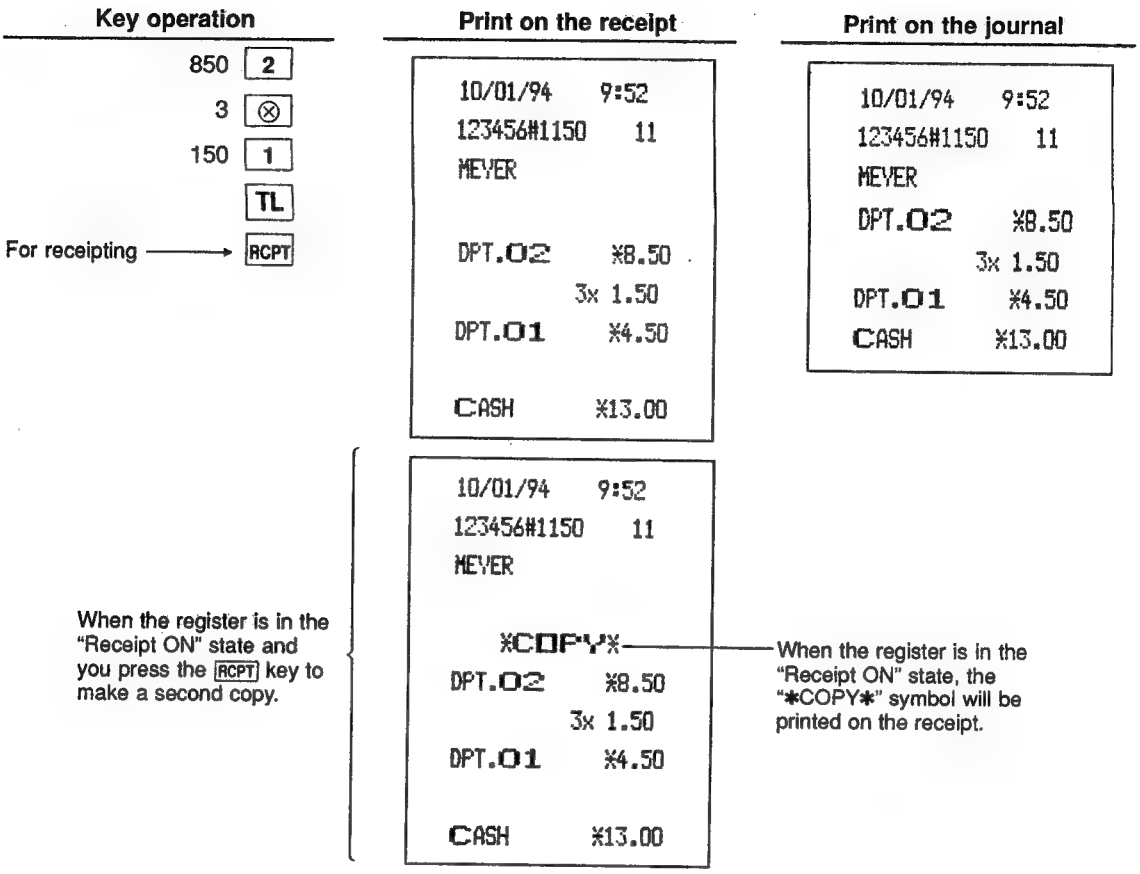
Note: Your register will print receipts regardless of the Receipt ON/OFF state except when the mode switch is in the "REG" position. This means that the receipt roll must be installed even when the register is in the "Receipt OFF" state.

VARIOUS PRINTING

1. Copy receipt printing

If your customer wants receipt after you have finalized a transaction in the "Receipt OFF" state (no receipting), press the [RCPT] key.
Your register can print copy receipts.
Either full item printing or total amount printing can be selected for a copy receipt. (For details, contact your dealer.)

Example: Printing a copy receipt after making the entries shown on the next page with the machine in the "Receipt OFF" state. (See the next page.)



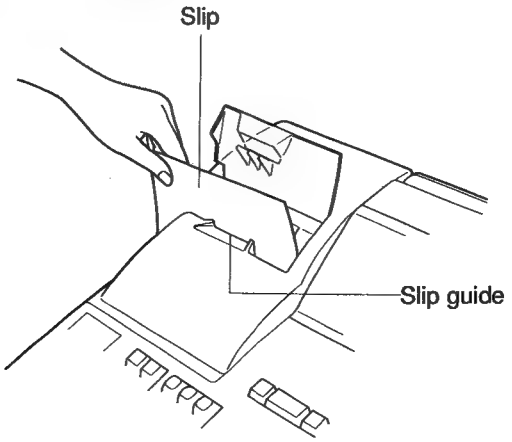
2. Validation printing function

The machine can perform validation printing.

2-1. Validation slip setting and printing

(1) Insert the slip, with its printed face to the front of the machine, into the slip guide. Make sure the slip is pushed in enough deep and fully to the right.

(2) Now press the VP key. The validation printing will start.



Note: Programmed compulsory validation printing can be overridden by performing the following operation. If you need this function, consult your dealer.

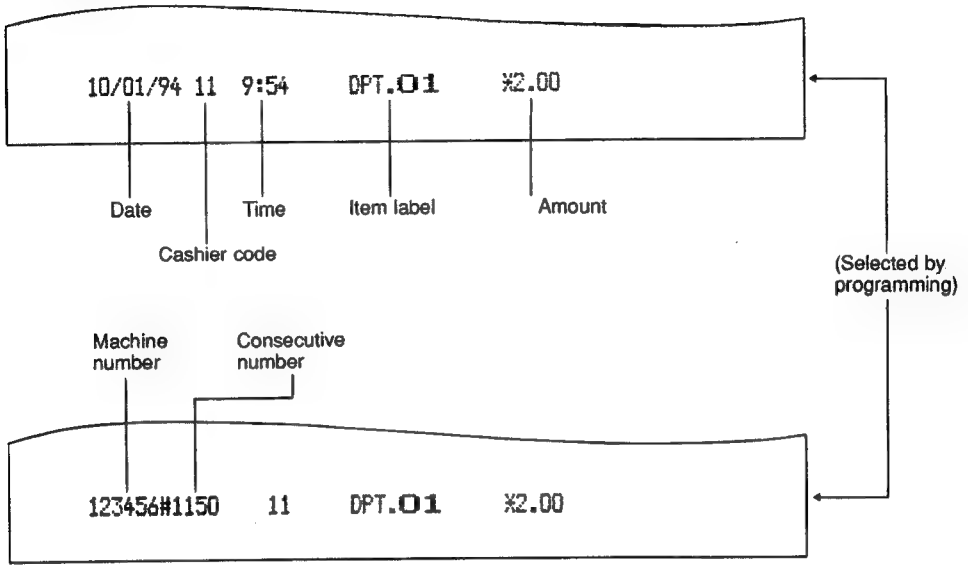
(1) Turn the mode switch to the "MGR" position.

(2) ⟶ [•] ⟶ [VP]

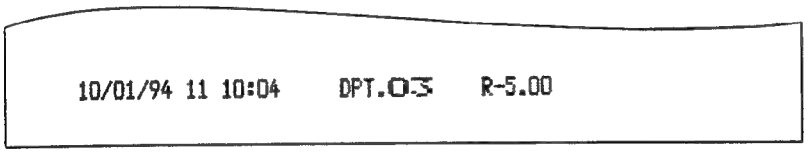
2-2. The validation printing can occur just after the following registrations

(1) Validation printing of item entries

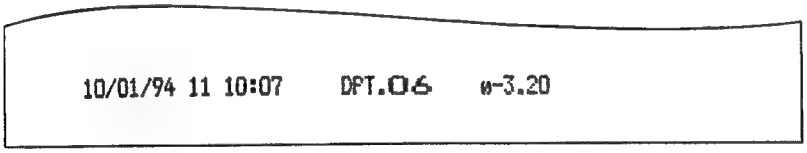
① Department entry



② Refund entry

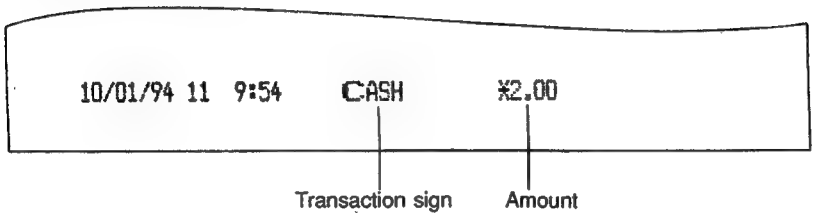


③ Direct or indirect void



Note: Other item entries can also be printed. For details, consult your local dealer.

(2) Validation printing after the finalization of a transaction



	Transaction signs (programmable)
① After completion of cash sale entry	
• When a change calculation occurs	✱ ✱ ✱ TOTAL
• When no change calculation occurs	CASH
② After completion of cheque sale entry	
• When a change calculation occurs	✱ ✱ ✱ TOTAL
• When no change calculation occurs	CHECK
③ After completion of credit sale entry	
• At only credit sale	CREDIT1 through CREDIT8
• At mixed tendering (cheque sale + cash sale)	✱ ✱ ✱ TOTAL
④ After completion of PO entry	✱ ✱ ✱ PO
⑤ After completion of RA entry	✱ ✱ ✱ RA

2-3. Validation slip specification

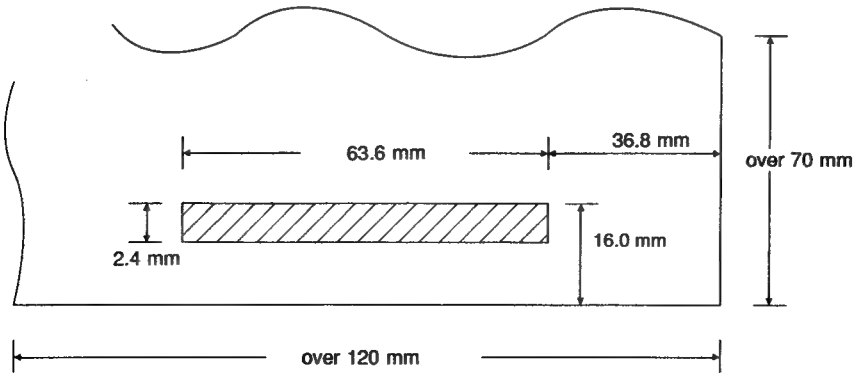
Make validation slips according to the following specification.
The use of any slips other than specified causes the printer to malfunction.

(1) Type of slip

Normal paper, pressure-sensitive paper, or carbon paper

(2) Dimensions of slip

Size: 120 mm or wider, 70 mm or longer
Thickness: 0.07 – 0.15 mm



OVERLAPPED CASHIER ENTRY

This function allows to switch from one cashier to another and to interrupt the first cashier's entry.
So the second cashier can do his entry in this mode.
For actual use of this function, contact your dealer.

Example:

Cashier 1 : Entry started
Cashier 2 : Cashier change (1 to 2), interrupt initiated
Cashier 2 : Transaction finished (2)
Cashier 1 : Cashier change (2 to 1), entry restarted

Note 1: The overlapped cashier entry is not effective while the tendering sale is going on.

Note 2: If any cashier is still making an entry (or has not finalized the transaction yet), the machine does not run in any mode other than REG and MGR, and no X/Z reports can be printed. The corresponding cashier number(s) is displayed at this time.

Key operation	Comments
(1) Cashier 1 is assigned.	The entry by cashier 1 is started.
(1 [CASH])	
100 [1]	
360 [3]	
[3]	
(2) Cashier 2 is assigned.	The entry by cashier 2 is started. (The entry by cashier 1 is interrupted.)
2 [CASH]	
3 [⊗]	
150 [2]	
[TL]	The transaction by cashier 2 is finalized.
(3) Cashier 1 is assigned.	The entry by cashier 1 is restarted.
1 [CASH]	
100 [1]	
300 [3]	
[TL]	The transaction by cashier 1 is finalized.

PRINTING OF THE EMPLOYEE ARRIVAL AND DEPARTURE TIMES

The register allows the operator to print the employee arrival and departure times, using the validation printing function.

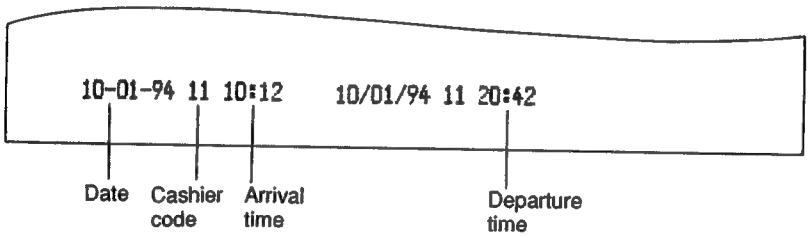
(1) Turn the mode switch to the "OP X/Z" position.

(2) Put a card into the paper chute and perform the following key operation.

1) Arrival time (printed on the receipt)
Numeric key 1 ——→ [VP]

2) Departure time (printed on the journal)
Numeric key 2 ——→ [VP]

Sample printout



MANAGER MODE

The manager mode is used when management decisions must be made concerning register entry, for example, for overriding limitations and void-mode operation.
You can also do all normal cash register operations in this mode.
To enter the manager mode, insert the manager key into the mode switch and turn it to the MGR position.

CORRECTION AFTER FINALIZING A TRANSACTION (AFTER GENERATING A RECEIPT)

When the manager needs to void incorrect entries that are found after finalizing a transaction or cannot be corrected by direct or indirect void, follow this procedure.

(1) Put the manager or submanager key in the mode switch and turn it to the MGR position.

(2) Press the [CA] key to put your register in the VOID mode.

(3) Repeat the entries that are recorded on an incorrect receipt.
This will result in all data for the incorrect transaction being removed from the machine's memory and the addition of the voided amounts to the VOID mode totalizer.

Incorrect receipt

```
10/01/94   10:18
123456#1156    11
MEYER

DPT.06      ¥3.20
DPT.07      ¥10.00

CASH        ¥13.20
```

Cancellation receipt

```
10/01/94   10:20
123456#1158    11
MEYER

    ¥ VOID MODE ¥
DPT.06      ¥3.20
DPT.07      ¥10.00

CASH        ¥13.20
```

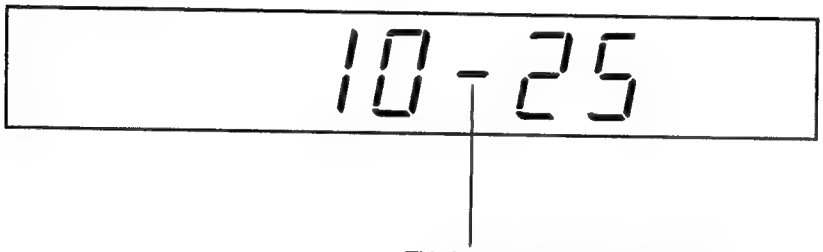
Note: Your machine retrieves the normal MGR mode whenever a transaction is canceled (i.e. finalized in the VOID mode). To void additional transactions repeat steps (2) and (3) above.

TIME DISPLAY AND AUTOMATIC UPDATING OF THE DATE

• Time display

When you need a time display, press the [#/TM] key in the OP X/Z, REG, MGR, X1/Z1 or X2/Z2 mode after preceding transaction or operation is finalized.
The time display disappears as soon as you press the [CL] key or begin the subsequent entry.

Sample display of 10:25



This bar flashes every 1 second.

• Automatic updating of the date

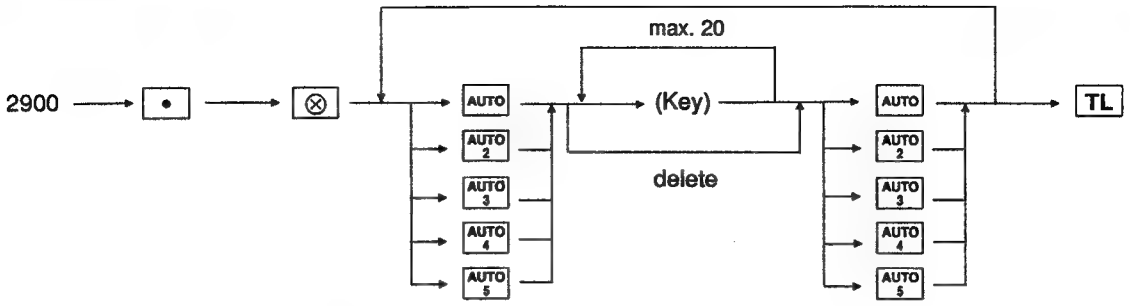
Once the internal clock unit is started at the correct time, it continues to run as long as the built-in battery is charged, and updates the date (day, month, year) properly.

AUTOMATIC KEY FUNCTION

• Programming the key sequence

You can program the key sequence data for the [AUTO] key in the X2/Z2 mode.

Procedure



Example:

Key operation

2900 • ⊗
AUTO
2 PLU/SUB
200 1
TL
AUTO
TL

Print

#2900 *PGM2*

#01

2 KEY
PLU
2 KEY
00 KEY
DEPT01
TOTAL

• Automatic key entries

When the [AUTO] key is depressed, the machine works as same as the programmed key-sequence is entered.
Operating modes that allow [AUTO] key entries:

- REG / MGR / VOID (You can use this function at any time.)
- OP X/Z / X1/Z1 / X2/Z2 (You can use this function when no operation has been done.)

Example:

Key operation

In the REG mode [AUTO]

Print

PLU.002 ¥1.20
DPT.01 ¥2.00

CASH ¥3.20

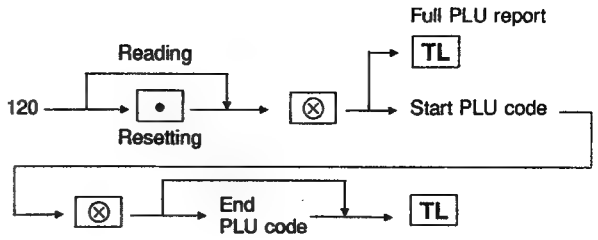
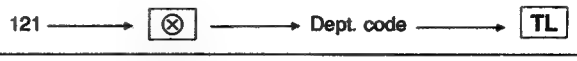
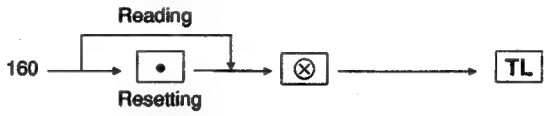
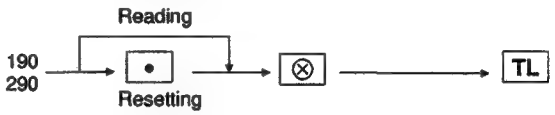
READING (X) AND RESETTING (Z) OF SALES TOTALS

- Use the reading function (X) when you need to take a reading of sales information entered since the last resetting. You can take this reading any number of times. It does not affect the register's memory.
- Use the resetting function (Z) when you need to clear the register's memory.
  Resetting prints all sales information and clears the entire memory except for the GT1 through GT3, reset count, and consecutive number.
- X and Z reports are printed on both the receipt and the journal.

Summary of reading (X) and resetting (Z) reports and the key operations to obtain the reports

{ X1 and Z1 reports: Daily sales reports
{ X2 and Z2 reports: Periodic (monthly) consolidation reports

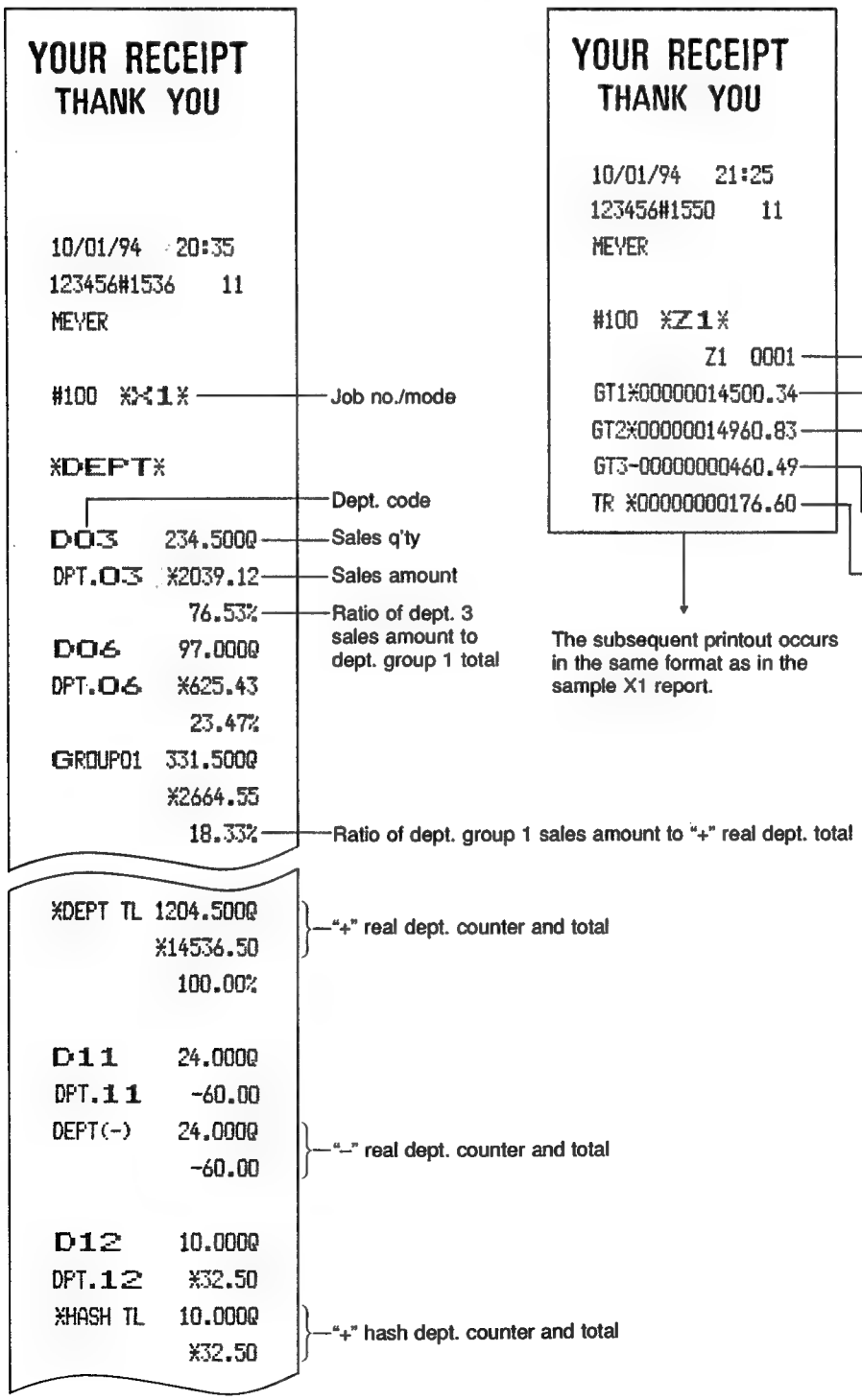
Item	Mode switch position		Job code	Key operation
	X1/Z1	X2/Z2		
General report (Full item report)	X1, Z1	X1, Z1	100	100 / 200 → • (Reading / Resetting) → ⊗ → TL
		X2, Z2	200	
Full cashier report	X1, Z1	X1, Z1	150	150 / 250 → • (Reading / Resetting) → ⊗ → TL
		X2, Z2	250	
Individual cashier report	X1, Z1	X1, Z1	151	151 / 251 → • (Reading / Resetting) → ⊗ → TL
		X2, Z2	251	
	<OP X/Z> X, Z		51	51 → • (Reading / Resetting) → ⊗ → TL
Full department report	X1	X1	110	110 / 210 → ⊗ → TL
		X2	210	
Individual group report of dept.	X1	X1	112	112 / 212 → ⊗ → Group no. → TL
		X2	212	
Group total report	X1	X1	113	113 / 213 → ⊗ → TL
		X2	213	
Total in drawer report	X1		131	131 → ⊗ → TL
Transaction report	X1	X1	130	130 / 230 → ⊗ → TL
		X2	230	

Item	Mode switch position		Job code	Key operation
	X1/Z1	X2/Z2		
PLU report by designated range	X1, Z1		120	
PLU report by assigned dept.	X1		121	
Hourly report	X1, Z1		160	
Stacked report	X1, Z1	X1, Z1	190	
		X2, Z2	290	

— SAMPLE REPORTS —

1. General report (Full item report)

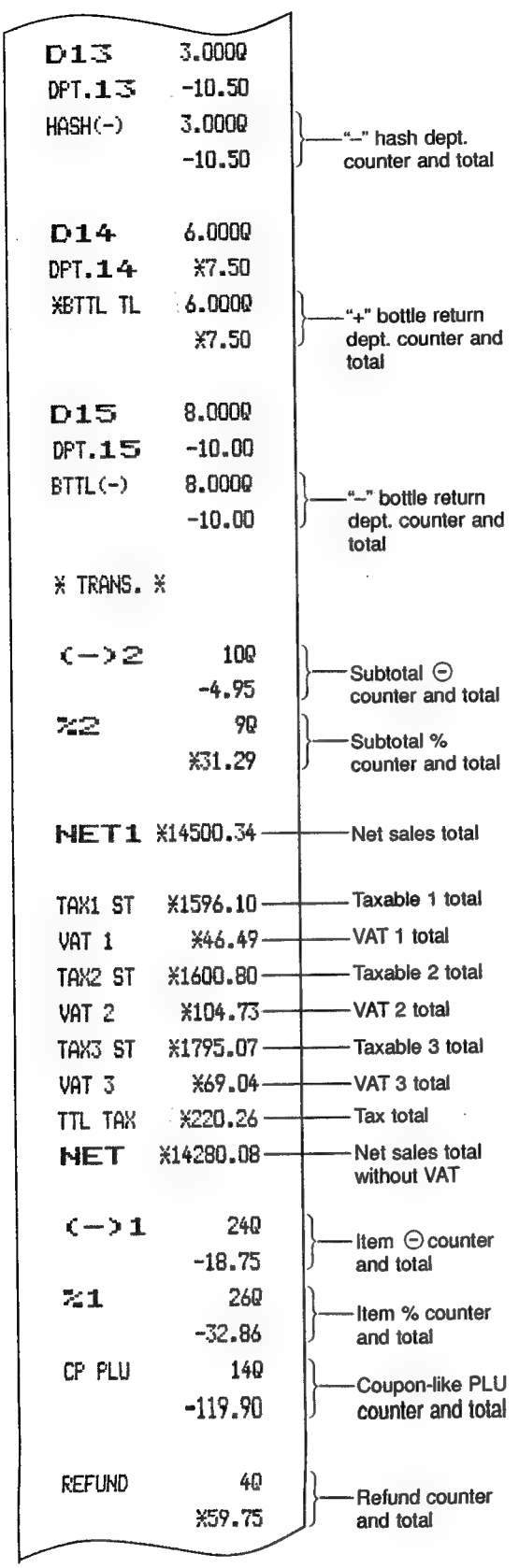
- **Sample X1 report**

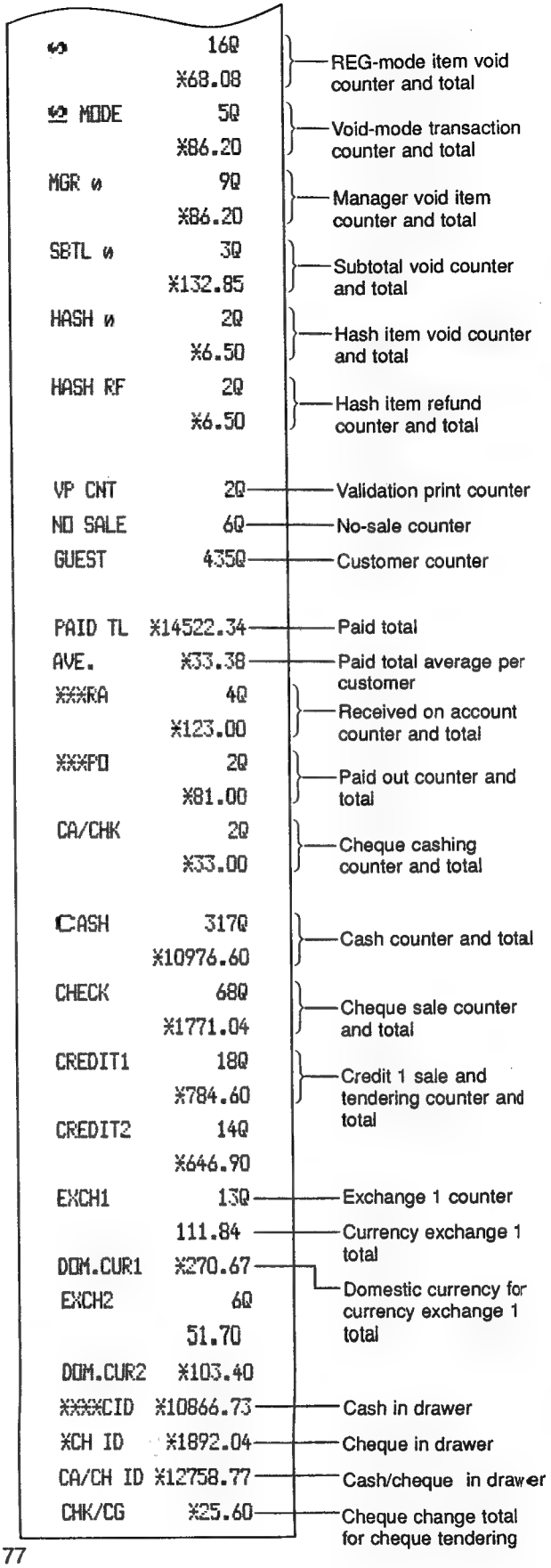


- **Sample Z1 report**

The subsequent printout occurs in the same format as in the sample X1 report.

To be continued on the next page

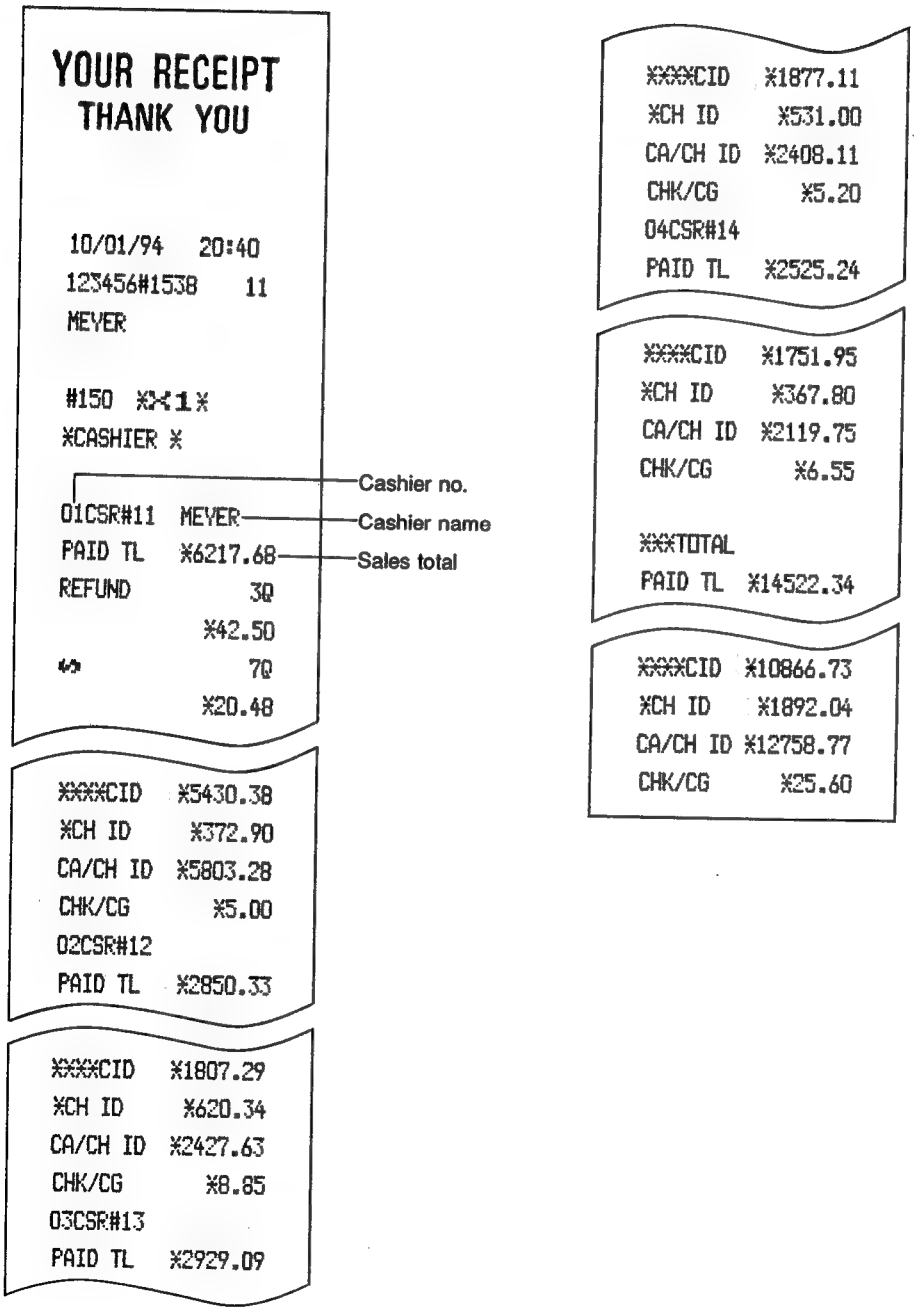

D13 3.000Q
DPT.13 -10.50
HASH(-) 3.000Q
-10.50
"–" hash dept. counter and total
D14 6.000Q
DPT.14 ¥7.50
¥BTTL TL 6.000Q
¥7.50
"+" bottle return dept. counter and total
D15 8.000Q
DPT.15 -10.00
BTTL(-) 8.000Q
-10.00
"–" bottle return dept. counter and total
¥ TRANS. ¥
(–)2 10Q
-4.95
Subtotal ⊖ counter and total
%2 9Q
¥31.29
Subtotal % counter and total
NET1 ¥14500.34
Net sales total
TAX1 ST ¥1596.10
Taxable 1 total
VAT 1 ¥46.49
VAT 1 total
TAX2 ST ¥1600.80
Taxable 2 total
VAT 2 ¥104.73
VAT 2 total
TAX3 ST ¥1795.07
Taxable 3 total
VAT 3 ¥69.04
VAT 3 total
TTL TAX ¥220.26
Tax total
NET ¥14280.08
Net sales total without VAT
(–)1 24Q
-18.75
Item ⊖ counter and total
%1 26Q
-32.86
Item % counter and total
CP PLU 14Q
-119.90
Coupon-like PLU counter and total
REFUND 4Q
¥59.75
Refund counter and total


16Q
¥68.08
REG-mode item void counter and total
MODE 5Q
¥86.20
Void-mode transaction counter and total
MGR 0 9Q
¥86.20
Manager void item counter and total
SBTL 0 3Q
¥132.85
Subtotal void counter and total
HASH 0 2Q
¥6.50
Hash item void counter and total
HASH RF 2Q
¥6.50
Hash item refund counter and total
VP CNT 2Q
Validation print counter
NO SALE 6Q
No-sale counter
GUEST 435Q
Customer counter
PAID TL ¥14522.34
Paid total
AVE. ¥33.38
Paid total average per customer
XXRA 4Q
¥123.00
Received on account counter and total
XXPO 2Q
¥81.00
Paid out counter and total
CA/CHK 2Q
¥33.00
Cheque cashing counter and total
CASH 317Q
¥10976.60
Cash counter and total
CHECK 68Q
¥1771.04
Cheque sale counter and total
CREDIT1 18Q
¥784.60
Credit 1 sale and tendering counter and total
CREDIT2 14Q
¥646.90
EXCH1 13Q
Exchange 1 counter
111.84
Currency exchange 1 total
DOM.CUR1 ¥270.67
EXCH2 6Q
51.70
DOM.CUR2 ¥103.40
Domestic currency for currency exchange 1 total
XXXCID ¥10866.73
Cash in drawer
XCH ID ¥1892.04
Cheque in drawer
CA/CH ID ¥12758.77
Cash/cheque in drawer
CHK/CG ¥25.60
Cheque change total for cheque tendering

2. Cashier report

(1) Full cashier report

- **Sample X1 report**



(2) Individual cashier report

- **Sample X1 report**

```
YOUR RECEIPT
THANK YOU

10/01/94   20:42
123456#1539    11
MEYER

#151  X<1X
XCASHIER X

01CSR#11  MEYER
PAID TL   ¥6217.68
REFUND         3Q
          ¥42.50
<>             7Q
          ¥20.48
<2 MODE        3Q
          ¥47.45
MGR 0          5Q
          ¥47.45
SBTL 0         1Q
          ¥65.60
GUEST        129Q
XXXRA          1Q
          ¥48.00
XXXPO          1Q
          ¥30.00
CA/CHK         1Q
          ¥20.00
```

- **Sample OP X report**

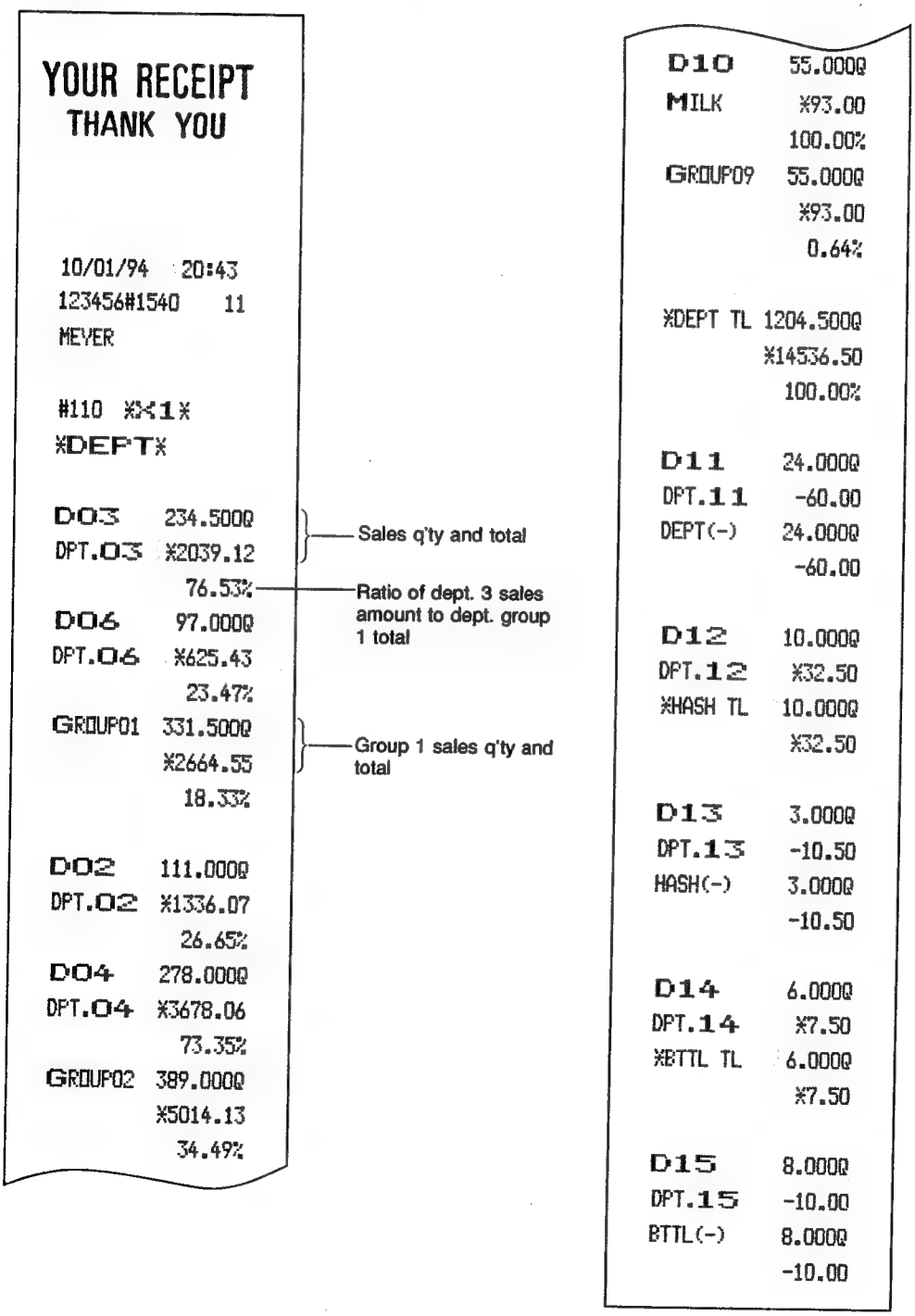
```
YOUR RECEIPT
THANK YOU

10/01/94   20:51
123456#1548    11
MEYER

#051  XOP<X
XCASHIER X
```

The subsequent printout occurs in the same format as in the sample X1 report.

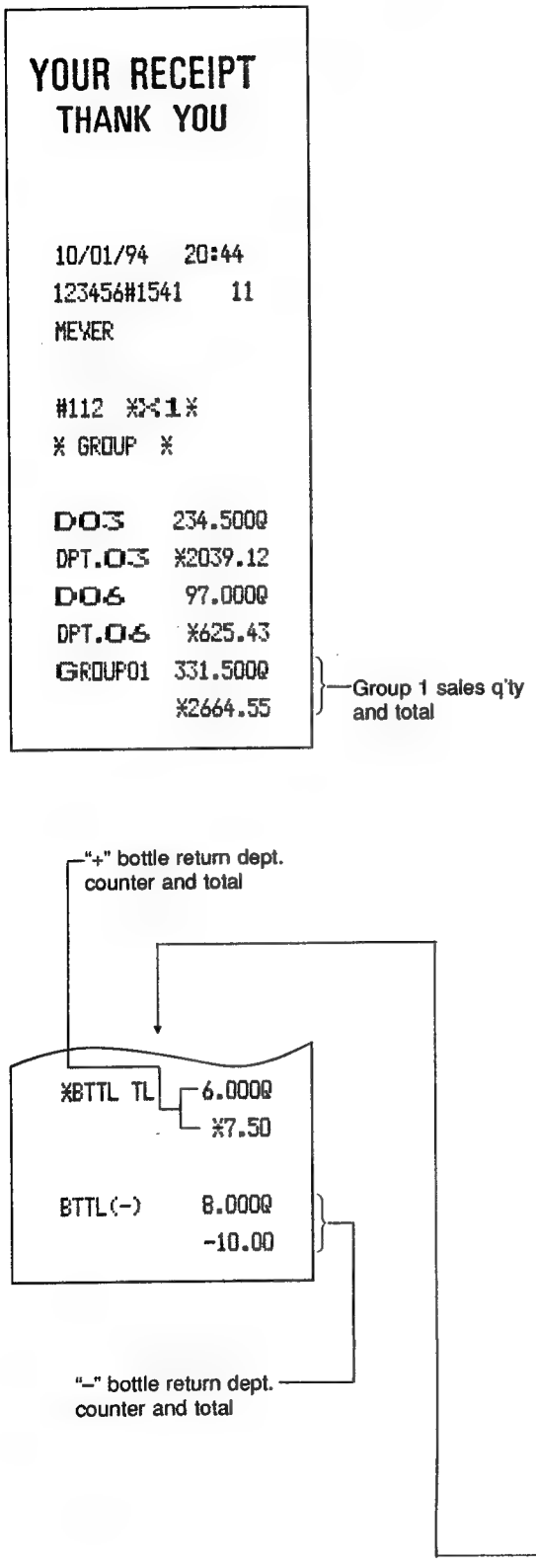
```
CASH          108Q
          ¥5487.48
CHECK          11Q
          ¥304.90
CREDIT1         4Q
          ¥252.80
CREDIT2         3Q
          ¥135.50
EXCH1           2Q
            13.26
DOM.CUR1  ¥32.10
EXCH2           1Q
             6.00
DOM.CUR2  ¥12.00
XXXCID    ¥5430.38
XCH ID    ¥372.90
CA/CH ID  ¥5803.28
CHK/CG       ¥5.00
```

3. Full department report

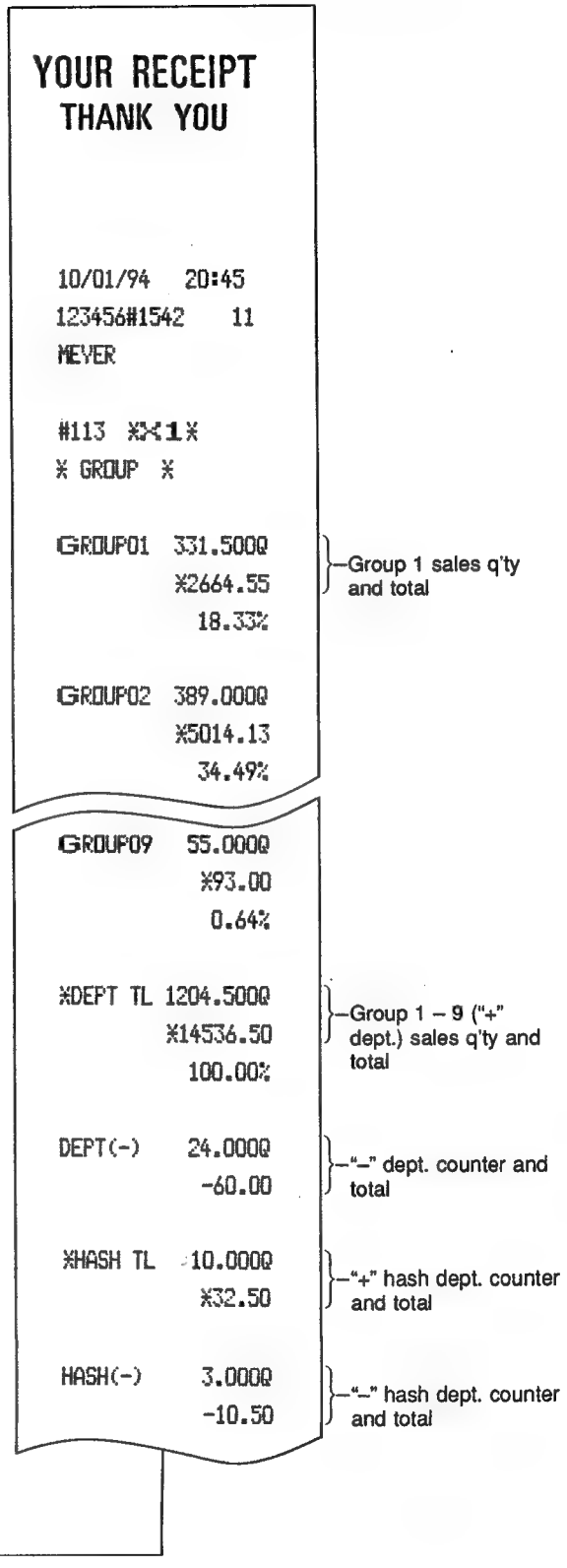
- **Sample X1 report**



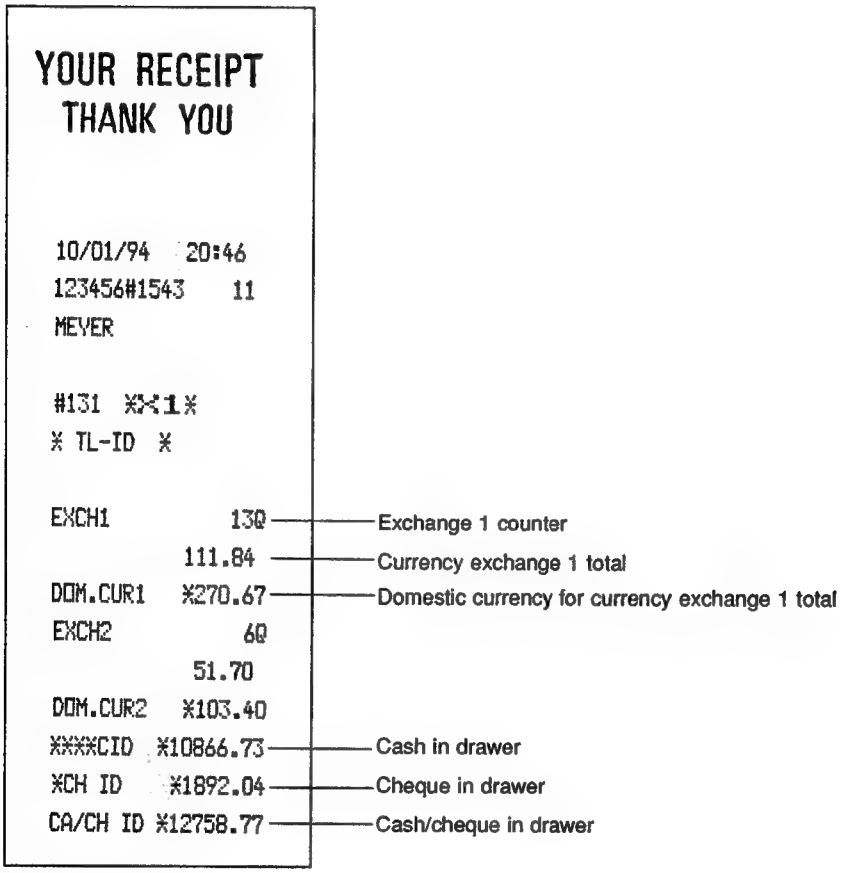
4. Individual group report of dept.



5. Group total report

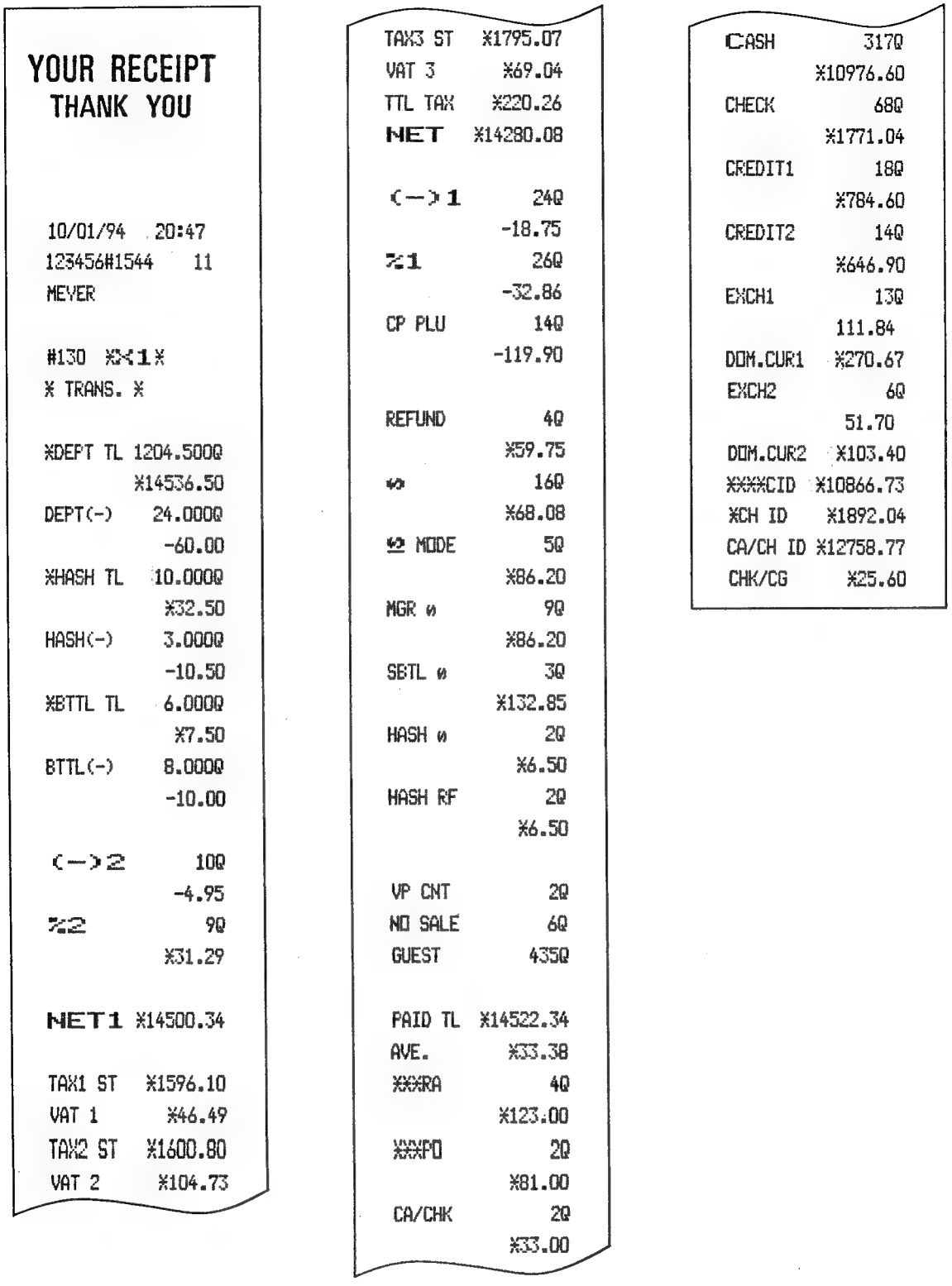


6. Total in drawer report



7. Transaction report

- **Sample X1 report**



YOUR RECEIPT
THANK YOU

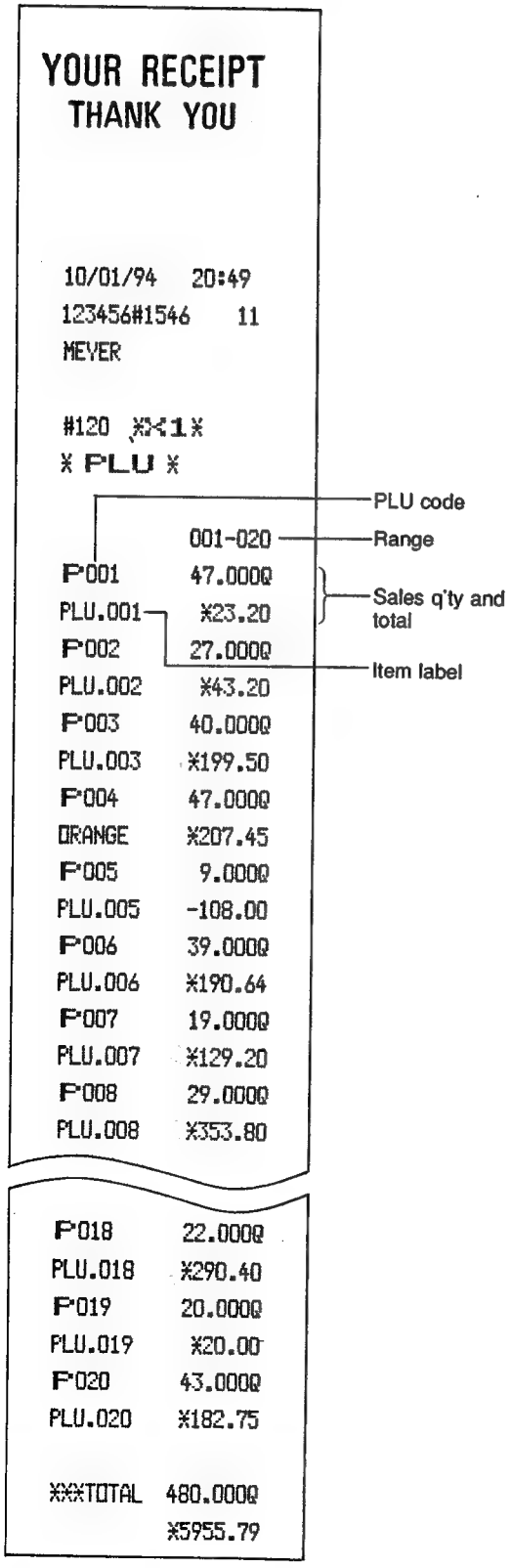
10/01/94 20:47
123456#1544 11
MEYER

#130 X<1X
X TRANS. X

XDEPT TL	1204.500Q
	¥14536.50
DEPT(-)	24.000Q
	-60.00
XHASH TL	10.000Q
	¥32.50
HASH(-)	3.000Q
	-10.50
XBTTL TL	6.000Q
	¥7.50
BTTL(-)	8.000Q
	-10.00
(-)2	10Q
	-4.95
%2	9Q
	¥31.29
NET1	¥14500.34
TAX1 ST	¥1596.10
VAT 1	¥46.49
TAX2 ST	¥1600.80
VAT 2	¥104.73
TAX3 ST	¥1795.07
VAT 3	¥69.04
TTL TAX	¥220.26
NET	¥14280.08
(-)1	24Q
	-18.75
%1	26Q
	-32.86
CP PLU	14Q
	-119.90
REFUND	4Q
	¥59.75
ø	16Q
	¥68.08
ø MODE	5Q
	¥86.20
MGR ø	9Q
	¥86.20
SBTL ø	3Q
	¥132.85
HASH ø	2Q
	¥6.50
HASH RF	2Q
	¥6.50
VP CNT	2Q
NO SALE	6Q
GUEST	435Q
PAID TL	¥14522.34
AVE.	¥33.38
XXXRA	4Q
	¥123.00
XXXPO	2Q
	¥81.00
CA/CHK	2Q
	¥33.00
CASH	317Q
	¥10976.60
CHECK	68Q
	¥1771.04
CREDIT1	18Q
	¥784.60
CREDIT2	14Q
	¥646.90
EXCH1	13Q
	111.84
DOM.CUR1	¥270.67
EXCH2	6Q
	51.70
DOM.CUR2	¥103.40
XXXCID	¥10866.73
XCH ID	¥1892.04
CA/CH ID	¥12758.77
CHK/CG	¥25.60

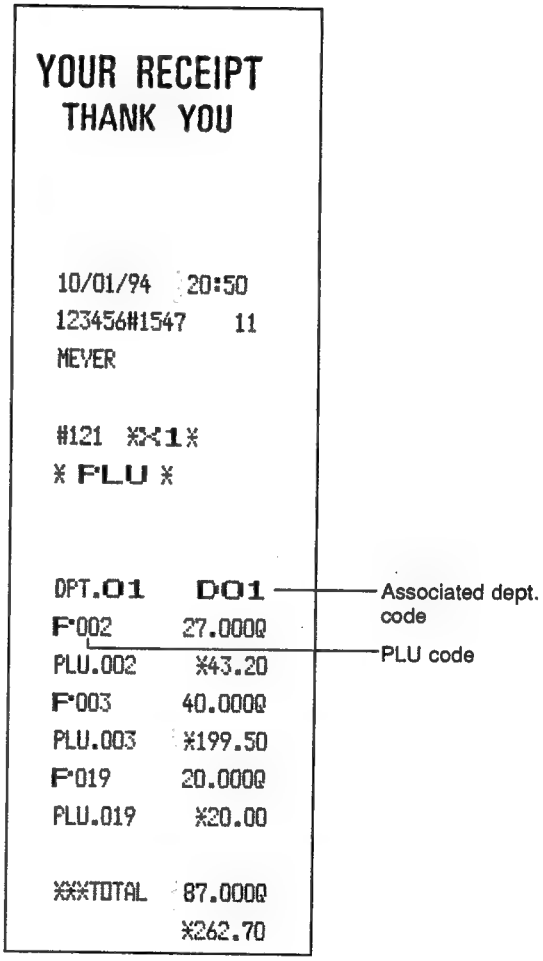
8. PLU report by designated range

- **Sample X1 report**



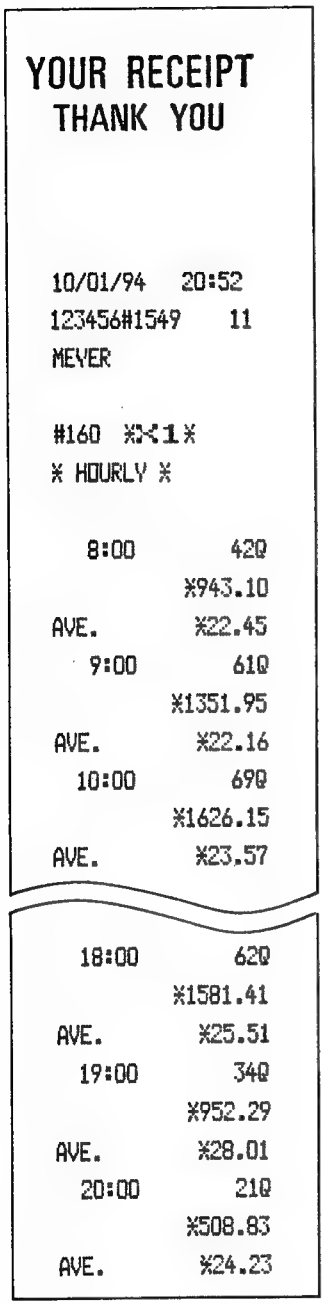
9. PLU report by assigned dept.

- **Sample X1 report**



10. Hourly report

- **Sample X1 report**



YOUR RECEIPT
THANK YOU

10/01/94 20:52
123456#1549 11
MEYER

#160 X X 1 X
X HOURLY X

8:00	42@
	¥943.10
AVE.	¥22.45
9:00	61@
	¥1351.95
AVE.	¥22.16
10:00	69@
	¥1626.15
AVE.	¥23.57
18:00	62@
	¥1581.41
AVE.	¥25.51
19:00	34@
	¥952.29
AVE.	¥28.01
20:00	21@
	¥508.83
AVE.	¥24.23

COMPULSORY CASH/CHEQUE DECLARATION

1. **If your machine has been programmed for compulsory cash/cheque declaration, you must declare cash/cheque in drawer in advance according to the type of the declaration when you take cashier Z reports.**
   Use the procedure shown in 3 below for this declaration.

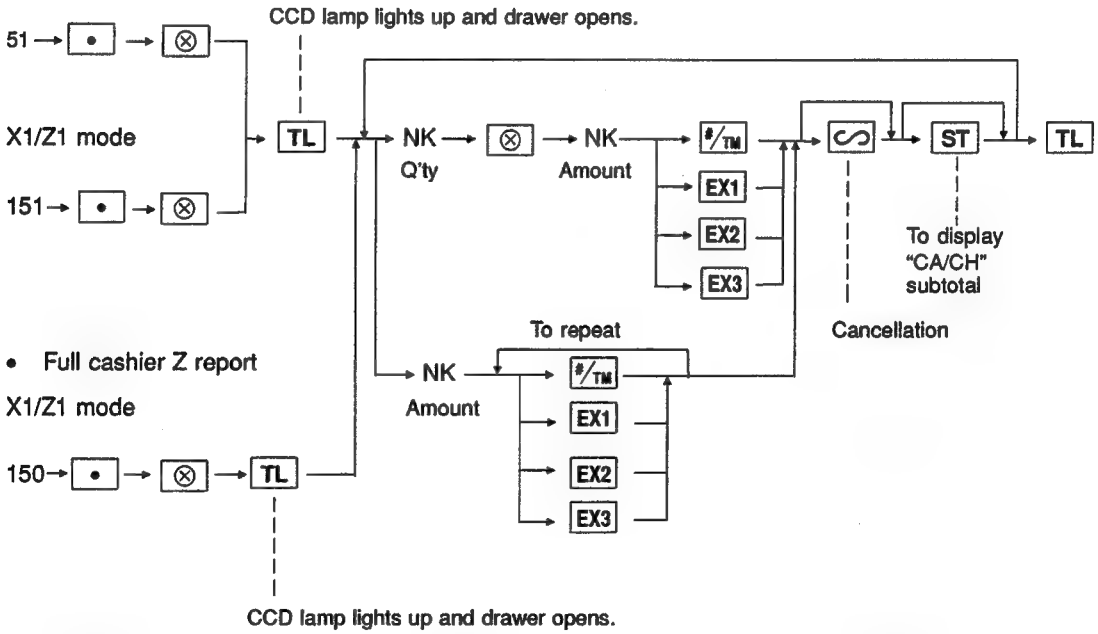
2. **Types of compulsory cash/cheque declaration**
   (1) Compulsive when individual cashier resetting is taken
   (2) Compulsive when full cashier resetting is taken

   Note: Compulsory cash/cheque declaration is available in the above two types. you can choose either of these. Consult your local dealer for details.

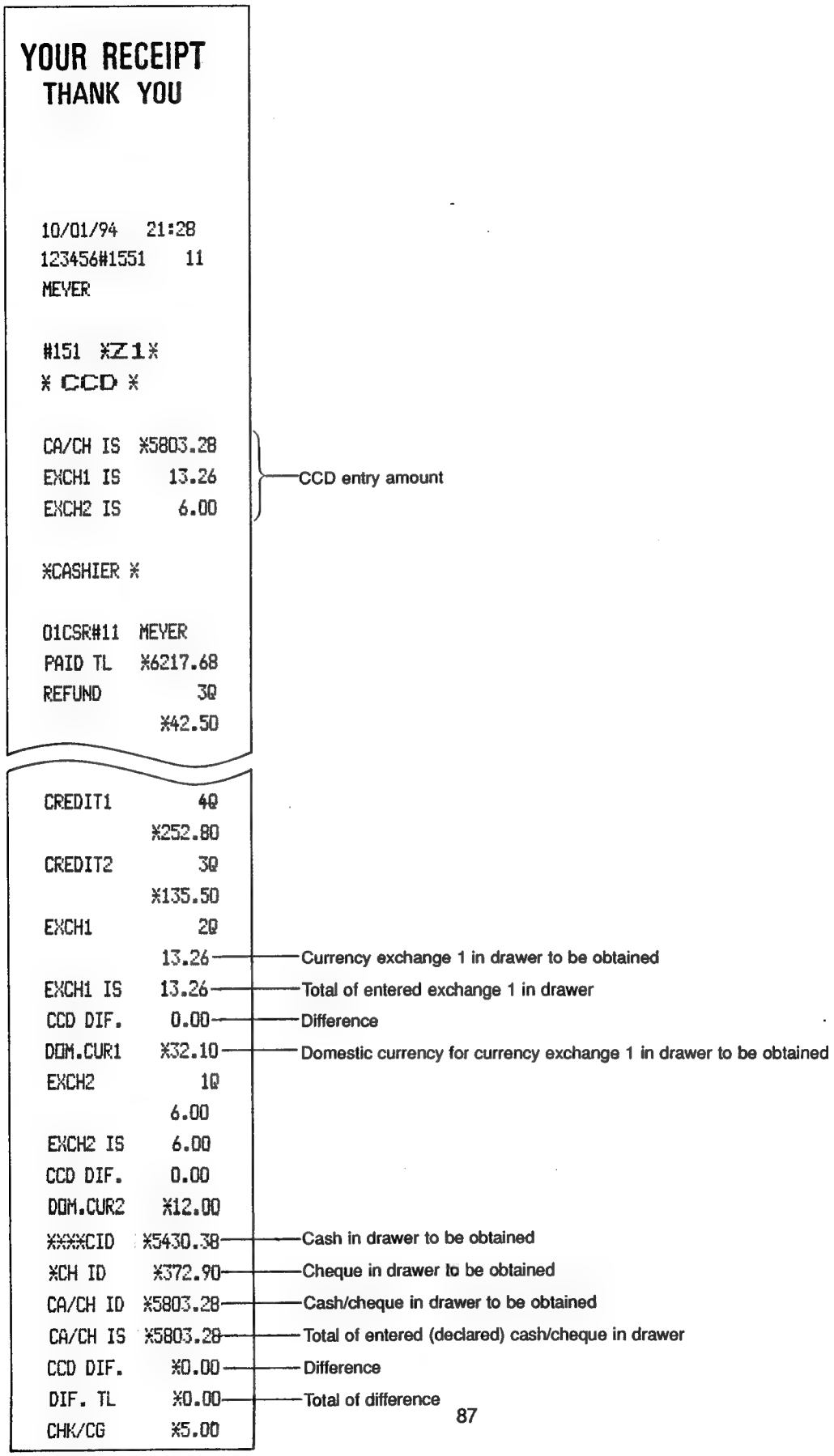
3. **Key operation**

   • Individual cashier Z report

   OP X/Z mode



#/TM : For Cash/cheque in drawer, EX1 – EX3 : For foreign currency in drawer


YOUR RECEIPT
THANK YOU
10/01/94 21:28
123456#1551 11
MEYER
#151 ¥Z1¥
¥ CCD ¥
CA/CH IS ¥5803.28
EXCH1 IS 13.26
EXCH2 IS 6.00
¥CASHIER ¥
01CSR#11 MEYER
PAID TL ¥6217.68
REFUND 3@
¥42.50
CCD entry amount
CREDIT1 4@
¥252.80
CREDIT2 3@
¥135.50
EXCH1 2@
13.26
EXCH1 IS 13.26
CCD DIF. 0.00
DOM.CUR1 ¥32.10
EXCH2 1@
6.00
EXCH2 IS 6.00
CCD DIF. 0.00
DOM.CUR2 ¥12.00
¥¥¥¥CID ¥5430.38
¥CH ID ¥372.90
CA/CH ID ¥5803.28
CA/CH IS ¥5803.28
CCD DIF. ¥0.00
DIF. TL ¥0.00
CHK/CG ¥5.00
Currency exchange 1 in drawer to be obtained
Total of entered exchange 1 in drawer
Difference
Domestic currency for currency exchange 1 in drawer to be obtained
Cash in drawer to be obtained
Cheque in drawer to be obtained
Cash/cheque in drawer to be obtained
Total of entered (declared) cash/cheque in drawer
Difference
Total of difference

TRAINING MODE

You can use the TRAINING mode if you need to train someone in register operations without any change in register's memory.
Reports are not available.
When the training is completed, cancel this mode and thus put your machine back into the normal mode of operation.

(1) TRAINING-mode programming (PGM2 mode)

Procedure

- For activation: 2910
- For cancellation: 2911

#2910 ✻PGM2✻
TRAINING START

#2911 ✻PGM2✻
TRAINING END

(2) Practice entries in the TRAINING mode

- Practice entries are allowed only when the mode switch is in the REG position or the MGR position.
- In order to identify training entries from actual ones, your register prints a "✻TRAINING✻" on the receipt and journal.
- The consecutive number is increased by one each time a receipt is published.

Sample printout of TRAINING-mode entries

```
YOUR RECEIPT
THANK YOU

10/01/94    8:45
123456#1109   11
MEYER

    ✻TRAINING✻
DPT.06      ¥3.20
DPT.09      ¥14.50

CASH        ¥17.70
```

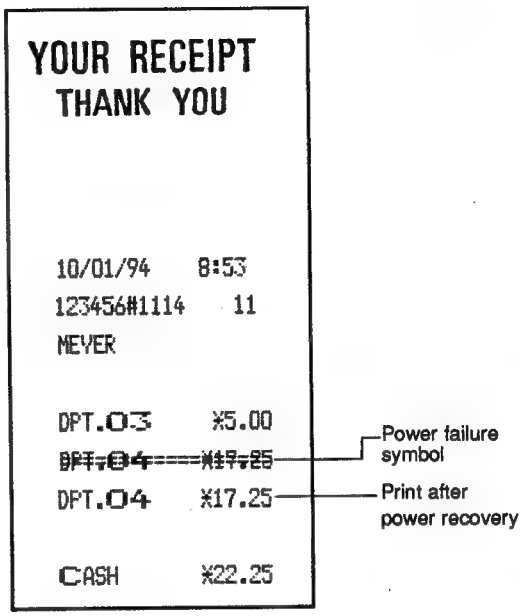
OPERATOR MAINTENANCE

1. In case of power failure

When power is lost, the machine retains its memory contents and all information on sales entries.

(1) When power failure is encountered in register idle state or during an entry, the machine returns to the normal state of operation after power recovery.

(2) When power failure is encountered during a printing cycle the register prints "========" and then carries out the correct printing procedure. (See the sample print.)



2. In case of printer's motor locking

If the printer's motor happens to lock, the printing stalls, and intermittent bleeping starts. You must, first of all, turn the mode switch to the ⏻ position and repair the paper jam. And then, when the mode switch is turned to a position other than ⏻, the following format appears in the display.

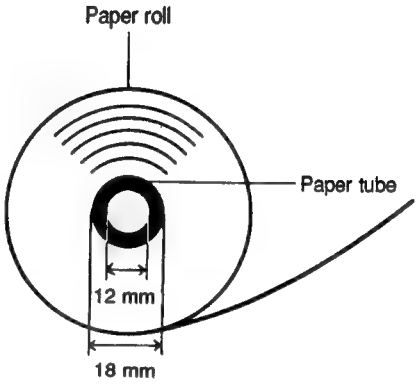
"----------"

Feed the roll paper to the proper position and depress the CL key. The register prints the power failure symbol and continues printing.

3. Paper roll near-end sensing function (only for journal paper) <option>

When the journal paper roll comes near the end or is not loaded, the machine senses this condition and sounds an alarm, displaying the error message "E". At this time, clear the alarm with the [CL] key and replace the paper roll as soon as possible.
The following entry can be made after clearing the alarm. However, since this function works each time one transaction is completed, the alarm sound will be emitted again as the following transaction is completed unless the paper roll is replaced.

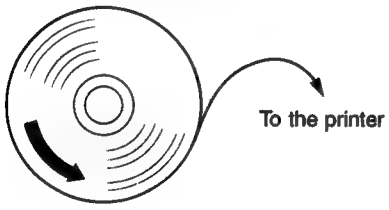
- The sensing position depends upon the size of the paper tube. Therefore, it is advisable to use paper rolls – whose paper tube is 18 mm in O.D. and 12 mm in I.D. – specified by SHARP.
- If the sensing occurs too early or late, contact your dealer.



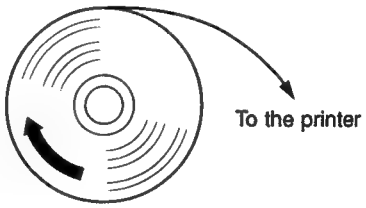
4. Installing and removing the paper roll

Install the paper roll in the printer. Be careful then to set the roll and cut the paper end correctly.

(How to set the paper roll)



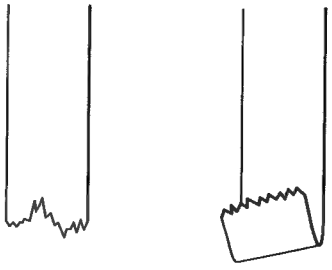
Correct



Incorrect

(How to cut the paper end)

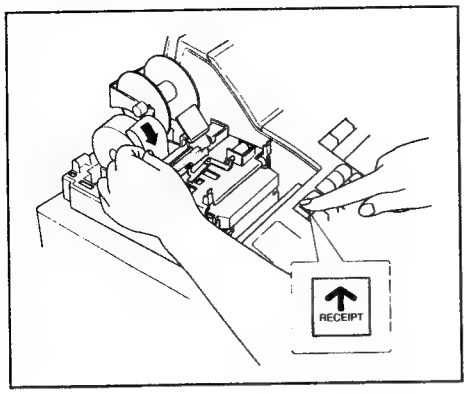
Correct



Incorrect

4-1. Installing the paper roll

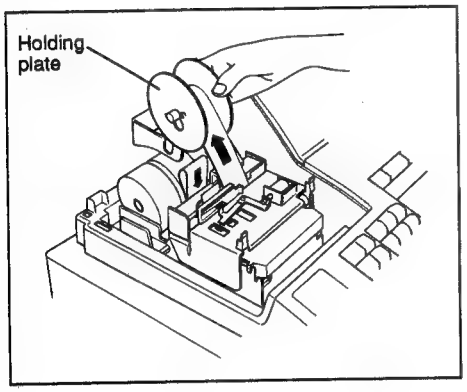
- **Installing the receipt paper roll**



(1) Remove the printer cover.

(2) Set the paper roll in place, insert its end straight into the paper chute of the printer and press the receipt paper feed key.

- **Installing the journal paper roll**



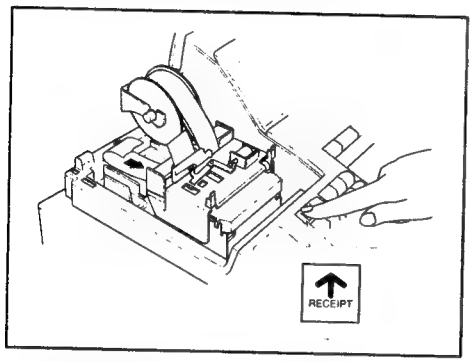
(1) Remove the printer cover.
Set the paper roll following the same procedure as above and press the journal paper feed key.

(2) Insert the paper end that has come out at the printing area of the printer, into the slit in the paper take-up spool and wind it two or three turns around the spool shaft. Then set the holding plate by inserting the spool shaft into the larger hole in the plate and slide it to the smaller one. And install the spool on the bearing.

4-2. Removing the paper roll

When a red dye appears on the paper roll, it is time to replace the existing paper roll.
Replace the paper roll with a new one.

- **Removing the receipt paper roll**

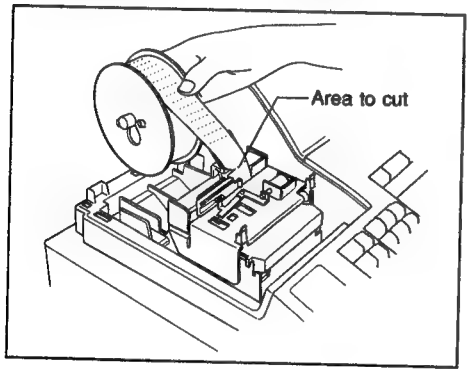


(1) Remove the printer cover.

(2) Cut the paper near the unused paper roll and remove the roll.

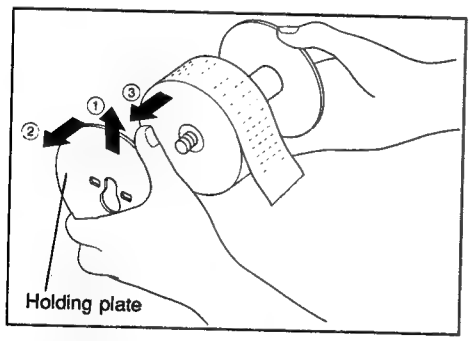
(3) Press the receipt paper feed key to remove the remaining paper from the printer.

- **Removing the journal paper roll**



(1) Press the journal paper feed key to advance the paper by several lines and then cut it.

(2) Cut the paper near the unused paper roll and remove the roll. Push the journal paper feed key to remove the remaining paper from the printer.



(3) ① Slide up the holding plate to move the spool shaft from the smaller hole in the plate to the larger one.
② Remove the holding plate from the spool shaft.
③ Remove the paper roll from the take-up spool.

Request

Be sure to use paper rolls specified by SHARP.
The use of any other paper rolls than specified could cause paper jamming, resulting in register malfunction.

Paper specification

Paper width:	37.5 ± 0.5 mm
Max. outside diameter:	80 mm
Weight:	52.3 – 64.0 g/m^2 (45 – 55 kg/1000 sheets/788 x 1091 mm^2)
Quality:	Bond paper
Paper tube:	18 mm

- Be sure to set paper roll(s) prior to using your machine, otherwise it could malfunction.

5. Installing the ink ribbon cassette

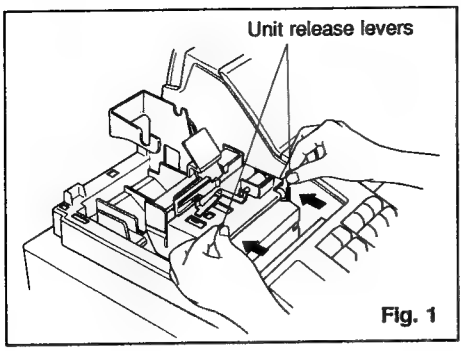


Fig. 1

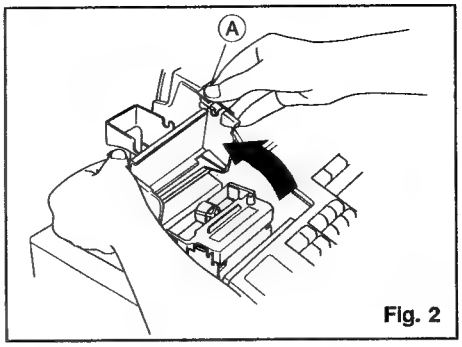
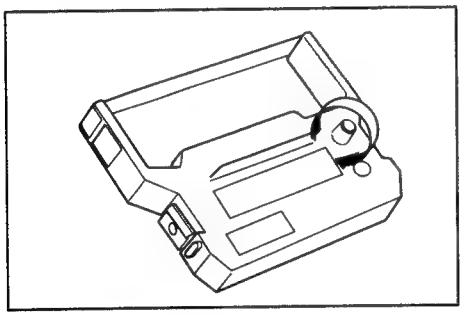


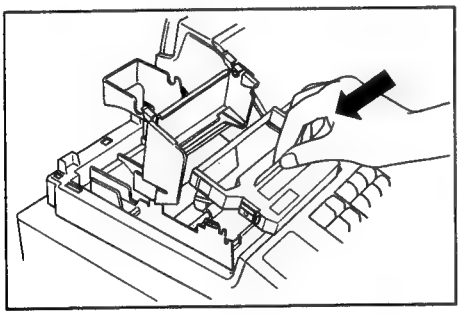
Fig. 2

(1) Remove the printer cover, push the unit release levers at a time (Fig. 1), and then lift part Ⓐ up (Fig. 2).

Note: To take down the unit (part Ⓐ), pull the unit stopper (Fig. 1) in the direction of the arrow and replace part Ⓐ gently.

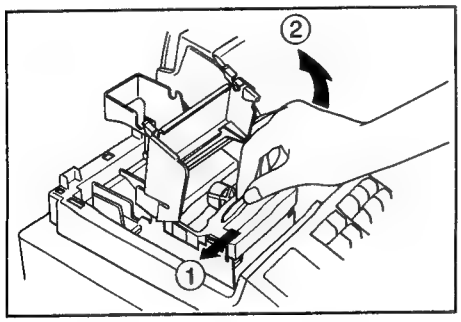


(2) Rotate the knob on the ink ribbon cassette in the direction of the arrow to stretch the ribbon tight.



(3) Put the ink ribbon cassette in the location indicated in the figure at left and fix it by using the right and left holders.

(4) Rotate the knob two or three turns in the direction of the arrow to make sure it rotates smoothly. Also, make sure the ribbon is not folded.



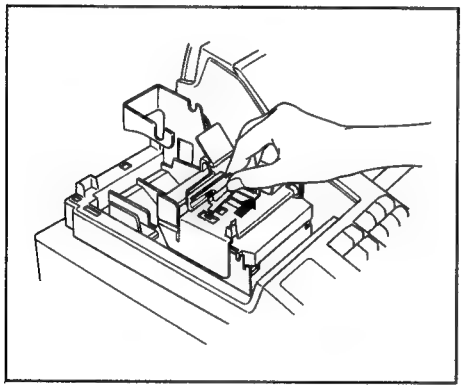
(5) To remove the cassette, push it to the left side, then lift the right side up.

Precautions

1. Be sure to use an ink ribbon cassette specified by SHARP. The use of any ink ribbon cassettes other than specified could cause troubles in the printer.
2. After opening the parcel, be careful not to make the surface of the ink ribbon dirty, and install it soon.
3. Don't pour ink into the ink ribbon cassette.
4. If you preserve the ink ribbon cassette for a long time, the ink will be dry and the ink ribbon cassette's life will be shortened. Please use it soon. If you don't use it soon, put it in an airtight receptacle and preserve it in a cool and dark place.
   Don't leave it in a location that is subject to high humidity and direct radiation.

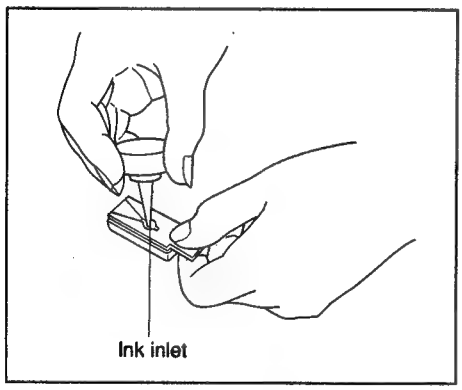
6. Ink refill

If the logo becomes too light, refill it with the supplied logo ink following the procedure given below.



(1) Remove the printer cover.

(2) Remove the store name logo by pulling it to the right.



(3) Pour two or three drops of logo ink through the ink inlet situated on the back of the logo.

(4) Replace the logo by the reverse procedure of removing.

(5) Replace the printer cover.

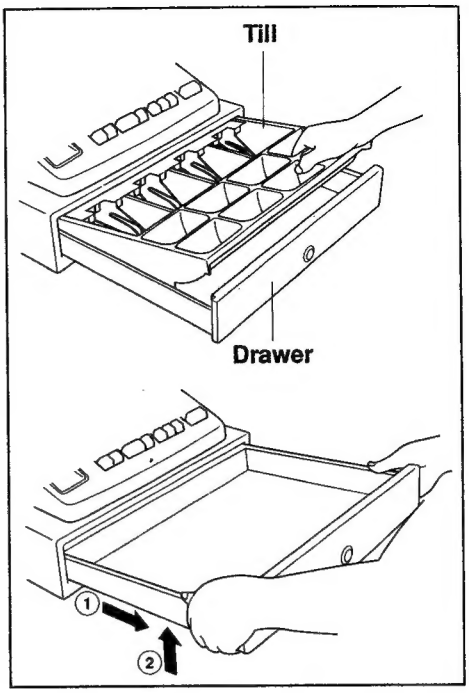
Precautions

1. The logo ink first gives a clear print 10 to 15 hours after being poured into the logo.
   Therefore, refilling after the daily business is most effective.
2. Overinking should be avoided. This will create a blurry print.
3. The ink is exclusively used for the logo.
   Do not apply the ink to the ink ribbon.

* When the supplied ink is exhausted, purchase the logo ink specified by SHARP.

7. Removing the till and the drawer

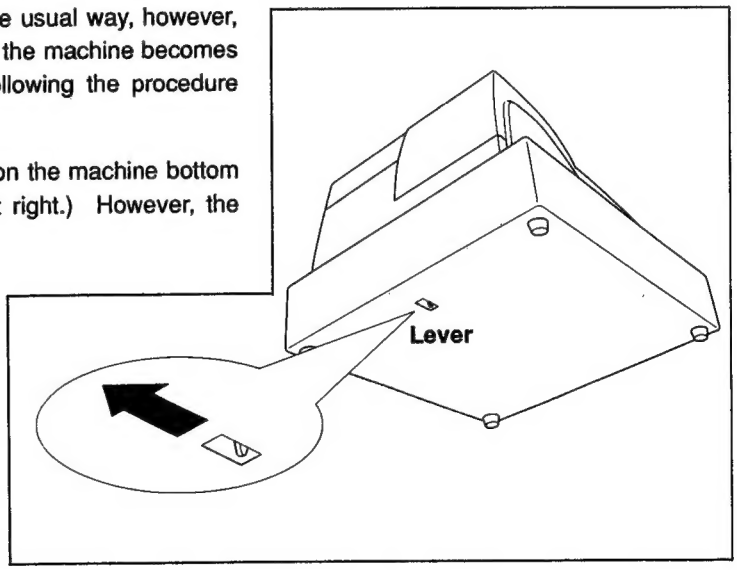
The till in the register is detachable. After closing your business for the day remove the till from the drawer and keep the drawer open. This will prevent money from being stolen. To detach the drawer, pull it forward fully with the till removed, and draw it out by lifting it up.



8. Opening the drawer by hand

The drawer automatically opens in the usual way, however, when power failure is encountered or the machine becomes out of order, open the drawer by following the procedure below.

Pull the lever in the opening located on the machine bottom toward the back. (See the figure at right.) However, the drawer will not open, if it is locked.



9. Before calling for service

The malfunctions shown in the left-hand column below, labeled "Fault," do not necessarily indicate functional faults of the machine. It is therefore advisable to refer to the "Checking" shown in the right-hand column before calling for service.

Fault	Checking
(1) The display won't be illuminated even when the mode switch is turned to any other position than " ⏻ ".	• Is power supplied to the electric outlet? • Is the power cord plug out or loosely connected to the electrical outlet?
(2) The display is illuminated, but the whole machine refuses entries.	• Is the mode switch set properly at the "REG" position?
(3) No receipt is issued.	• Is the receipt paper roll properly installed? • Is there a paper jam? • Is the register in the "Receipt OFF" state?
(4) No journal paper is taken up.	• Is the take-up spool installed on the bearing properly? • Is there a paper jam?
(5) Printing is unusual.	• Is the ink ribbon cassette installed properly? • Is the ink ribbon's life completed?

– Program resetting –

When the program resetting is performed, the register returns to the initial state with the memories all kept intact. If you need this function, please contact your local dealer.

< Procedure >

1) Unplug the register.
2) Turn the mode switch to the "PGM2" position.
3) Plug the register, keeping the receipt paper feed and journal paper feed keys depressed.

After the operation the printer prints "PRG. RESET ✱✱✱ " on the journal.

If the register still malfunctions even after program resetting, contact your local dealer.

LIST OF OPTIONS

For your ER-A430, the following options are available.
Do not try to install any options yourself.
For details, contact your dealer.

1. Till model ER-48CC2 and till cover model ER-01CV1/CV2/CV3/CV4/CV5
2. 1 port RS232 interface model ER-A4RS
3. RS232 control ROM model ER-A43R1
4. Connection cable (ECR to ECR) model ER-A5CB
5. Key kits for changing the keyboard layout
   - ER-11KT6: 30 regular size key kits
   - ER-12KT6: 30 1x2 size key kits
   - ER-22KT6: 10 2x2 size key kits
   - ER-11DK6: 30 regular size dummy key kits
   - ER-51DK6: 10 5x1 size dummy key kits

SPECIFICATIONS

Model:	ER-A430	
External dimensions:	420(W) x 426(D) x 298(H) mm 420(W) x 426(D) x 288(H) mm (the set delivered to the U.K. or Australia)	
Weight:	13.5 kg 12.9 kg (the set delivered to the U.K. or Australia)	
Power source:	Official (nominal) voltage and frequency	
Power consumption:	Stand-by: 11 W	Operating: 27 W
Working temperature:	0°C to 40°C	
Electronics:	LSI (CPU), etc.	
Built-in battery:	Ni-Cd rechargeable battery, memory holding time about 1 month (with fully charged built-in battery, at room temperature)	
Display:	Operator display: 7-segment display (10 positions) Customer display: 7-segment display (7 positions)	
Printer:		
Type:	2-station serial dot-matrix (7x7 font) printer	
Printing speed:	3.0 lines/second	
Printing capacity:	18 digits each for receipt and journal paper	
Other functions:	1. Logo function 2. Receipt ON-OFF function, journal selective function 3. Receipt and journal independent paper feed function 4. Validation printing function	
Ink ribbon: (Cassette type)	Color: Purple (single color) Width: 13 mm Length: 10 meters	
Logo:	Dimensions of the printing face: 30(W) x 10.5(H) mm	
Paper roll:	Width: 37.5 ± 0.5 mm Max. diam.: 80 mm Weight: 52.3 – 64.0 g/m^2 (bond paper)	
Cash drawer:	4 slots for bills and 8 for coins	
Accessories:	Manager key	2
	Submanager key	2
	Operator key	2
	Drawer lock key	2
	Printer cover lock key	2
	Ink ribbon cassette	1
	Standard logo	1 (mounted on the printer)
	Logo ink	1 (5 cc)
	Paper roll	2
	Take-up spool	1
	Instruction manual	1 copy

* Specifications and appearance subject to change without notice for improvement.